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ROYAL COMMISSION ON COAL

Fredericton, N. B., Friday, February 16th, 1945.

VOLUME XVII

Witnesses:

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ROYAL COMMISSION ON COALFREDERICTON, N. B.FRIDAY, FEBRUARY 16, 1945.

The Royal Commission on Coal convened in the Legislative Assembly at Fredericton, N.B., On Friday, February 16, 1945, at 10.00 A.M.

PRESENT:

Mr. Justice W. F. Carroll, Chairman
Mr. Justice C. C. McLaurin, Commissioner
Angus J. Morrison, Esquire, Commissioner
J. J. Frawley, K.C., Commission Counsel
J. L. Dubinsky, Assistant Counsel
R. D. Howland, Secretary.

HON. J. B. McNAIR, Premier of New Brunswick:- Mr. Chairman and members of the Commission, it is my pleasing privilege this morning to extend to you, on behalf of the Province, a word or two of welcome and to assure you of the desire of us all to assist you in your very important work.

We realize that our coal industry is of relatively modest dimensions or proportions, yet it possesses a historic background and is an integral part of our economy. The successful operation of our coal fields is a factor in the general business and economic life of our Province. A substantial community has been built around them. In the progress of that community we are vitally interested. Moreover the industry is intimately tied in with our electric power position. Our publicly-owned electric system depends on the Grand Lake coal areas, as a substantial source of energy.

We are all familiar with the lack of balance which prevails throughout Canada in the field of industrial and commercial development. New Brunswick is seeking a correction of those conditions. It is realized that initial improvement rests primarily on the expansion of our basic industries and

the development of industrial undertakings based on natural resources. Any suggestions the Commission can advance to induce healthier conditions in our coal industry will be indeed welcome.

One would have wished for you another season for your visit. Not that winter in New Brunswick has no attractions; but to sense the real charm of our Province you should see her in her summer dress. No doubt you will be told a similar story in every Province of Canada. We, however, have realities to buttress our feeling of pride.

The submission of the Province will be presented by Dr. Rowley, Chairman of our Resources Development Board. Dr. Wright and Mr. Clements representing the Department of Lands and Mines will also be available to furnish any desired information. I can assure you that you may at all times count on the desire of this Government to be helpful and on our willingness to collaborate with you in your very important work.

I am equally sure that I can speak likewise for the various other groups who will appear before you. Their submissions will, I confidently anticipate, prove of interest and value.

BY THE CHAIRMAN: On behalf of the Commission, Mr. Premier, I thank you very sincerely for your kind and warm words of welcome. We thank you also for the honor of giving us a place in the historic Provincial Building of a historic City and a historic Province.

It is perhaps more or less unfortunate that we could not come here during the summer months but I am afraid, Mr. Premier, that when you say that we get the same story in every Province of the Dominion, that they would wish that we came there in summer time I have been instructed, and forcibly instructed, by my two friends right and left that there is no such thing as winter either in Alberta or British Columbia; it is only just a mistake of climatic conditions and geography perhaps that you slip into.

We hope to be able to do something for the coal industry throughout Canada, with the proper co-operation, and we are happy indeed to find that co-operation in the capital of this Province. We are tackling this thing as a national problem. The people of the country generally, those who use coal, are as keenly interested as is the operator or the man who uses a pick in the mines, in the success of our coal industry. We forget, unfortunately, especially those who are operators, that in this country we are only able under present conditions to supply much less than half of the coal necessities of this country.

Anything we can do to promote the interests not only of that industry and the people who work in it, but also of the people of Canada who use fuel, you may be assured we will gladly do. That is the work we have undertaken and we hope to achieve some success.

BY MR. FRAWLEY: I understand that the Province of New Brunswick is surrendering its right to lead and has yielded its place to the Coal Operators.

A. D. TAYLOR: The New Brunswick Coal Operators Association is submitting a brief concurred in by all members of the Association, which represents practically 90 percent of the output of this province, and Dr. Petrie is presenting this brief. All members of the Association are present in the room. Some matters may come up that need more amplification than he is prepared to give, and the members are here and they will be glad to help out. I don't think there is need for me to say anything further, only to ask Dr. Petrie to proceed.

DR. J. R. PETRIE. Examined by Mr. Frawley.

Q You have a written submission, I take it?

A Yes sir.

Q What are your initials?

A J. R.

Q You are a member of the staff of the University of New Brunswick?

A Yes sir.

Q What department?

A Economics.

Q Do I understand that you are appearing here this morning for the New Brunswick Coal Producers' Association?

A That's right.

Q That is an incorporated or unincorporated Association?

A Unincorporated.

Exhibit 73 - Submission of the New Brunswick Coal Producers' Association.

Dr. Petrie proceeds to read Exhibit 73.

In common with other coal producing areas, the New Brunswick coal field has been faced with a serious economic problem over a long period of years. This submission attempts to indicate the nature of the basic economic problems, some of which parallel those of other coal areas, while others are peculiar to New Brunswick. Specific proposals are then made, embodying what the New Brunswick Coal Producers' Association believes to be the steps necessary to place the New Brunswick coal industry on a sound economic basis.

A. THE COAL AREA.

Bituminous coal has been mined in New Brunswick over a longer period, perhaps, than in any other part of North America. The Minto field was referred to by Samuel Pepys in his Diary, September 5, 1667, and coal was exported from Grand Lake to Boston during the 17th Century.

The Minto coal basin covers an area of some 400 square miles near the head of Grand Lake in Queens and Sunbury counties. The known coal reserves cover an area of approximately 147 square miles. Minto, the centre of the mining district, is 35 miles east of Fredericton on a branch of the Canadian Pacific Railway. It is also connected with the Transcontinental main line of the Canadian National Railways by a short branch to

Hardwood Ridge Station, serving the northern part of the field, and it is connected with Chipman by the C.P.R. (See Map, Exhibit A).

Exhibit 74 - Map showing rail connections of
Minto coal basin

Chipman is the only other important population centre in the coal area. It is served by three railway connections--the Transcontinental line of the C. N. R.; the C. P. R. branch to Fredericton; and a C. P. R. branch to Norton, on the main line of the C. N. R. between Saint John and Moncton.

B. ECONOMIC IMPORTANCE OF THE INDUSTRY

While coal mining is not one of New Brunswick's major industries, it represents an important segment of the provincial economy, and dominates the regional economy of the coal basin area. From 1930 to 1942 the value of coal production ranged from 1.2 to 2.2 per cent of the net value of the total production of all commodities in the province. In 1939, which may be considered to be a normal year, coal output accounted for 2.1 per cent of the value of all goods produced in New Brunswick. (See Table 1, Appendix)

From 1933 to 1942 the coal industry employed an average of 1,157 persons, and in this period the average level of employment never fell below 1,025 (see Table 2). In 1939, the last year before the war, when conditions were normal and production and sales were firm, 1,284 persons were employed. In 1940 employment increased to 1,406. This has since fallen off because of the manpower shortage, and in 1943 only 915 persons were employed.

The total number of days worked per year ranged from a low of 235,392 in 1938 (a strike year), to a high of 385,677 days in 1940, the all-time record year of production. Employment in the Minto field has tended to be steadier than in Nova Scotia, as shown in the following figures:

Average Number of Days Worked Per Man Year
in New Brunswick and Nova Scotia

<u>Year</u>	<u>N. B.</u>	<u>N. S.</u>	<u>N. B. over N. S.</u>
1931	196	182	+ 14
1932	219	155	+ 64
1933	250	170	+ 80
1934	229	233	- 4
1935	231	217	+ 14
1936	232	227	+ 5
1937	244 ¹	247	- 3
1938	210 ¹	204	+ 6
1939	257	231	+ 26
1940	274	263	+ 11
1941	267	279	- 12
1942	262	276	- 14

Over the twelve years examined, the average number of days worked per man year in New Brunswick was 239, as against 224 in Nova Scotia. In only four of these years was the Nova Scotia average higher than that of New Brunswick, and in only one of those years (1939) was it substantially higher. On the other hand, during the worst depression years of 1932 and 1933, New Brunswick miners averaged from 10 to 13 weeks more work than the miners in Nova Scotia. This, of course, resulted in higher earnings in New Brunswick as work increased, and it reversed the previous position of average annual earnings in the two provinces. In 1932 average annual wages in New Brunswick were \$716 as against \$790 in Nova Scotia; but in 1933 the New Brunswick figure was \$840, compared with \$730 in Nova Scotia.

BY COMMISSIONER MORRISON: At that point when you are referring to average annual earnings in New Brunswick were \$716, is that the net or the gross earnings?

BY DR. PETRIE: Those earnings are as reported by the Dominion Bureau of Statistics, wages paid.

¹ Strike loss - 90 days in 1937-38.

BY COMMISSIONER MORRISON: And you don't know if they were the gross earnings or the net earnings, that is before they paid for powder?

DR. PETRIE: I believe they are gross. (Continues brief):

Furthermore employment increased steadily in the New Brunswick industry from 1931 up until the strike in 1937, while it fell sharply in Nova Scotia from 1931 to 1933, and did not recover its 1931 level until 1938.

The payroll of the New Brunswick coal industry during the period 1933 - 1942 ranged from a low of \$678,844 in 1934, to a high of \$1,251,207 in 1941 (Table 2). In the pre-war period these wage payments provided from 1.1 to 1.6 per cent of the total salaries and wages received in New Brunswick by all employees of every kind (see Table 3). The relative importance of the industry's payroll in the production economy of New Brunswick is indicated in Table 4.

In 1941 the coal mining payroll was greater than that of any major group of manufacturing industries except the pulp and paper mills and sawmills, which are New Brunswick's most important secondary industries. In terms of average pay per worker, the coal industry paid more than six of these key industries, less than five. The coal industry's average was 43 per cent less than the highest pay group (pulp and paper) and 61 per cent greater than the lowest (fish packing).

The importance of a million dollar payroll, concentrated in a community the size of the coal area, is obvious. In 1941 the population of the Parishes of Canning and Chipman in Queens County, and Northfield in Sunbury County, which are for the most part in the coal area, was 8,308, not to mention Sheffield and Waterborough, part of which lie in the coal area. The economic welfare of some 6,000 persons is directly dependent upon the coal industry. Furthermore, the purchasing power represented by the industry's payroll is of considerable importance to the economy of Fredericton, Saint John and Moncton, which are shopping centres for the coal community. Thus the indus-

try is of vital importance to a relatively large number of people over a wide area.

The Minto coal field is of critical importance in the production of electric energy in New Brunswick. The most important generating station of the New Brunswick Electric Power Commission is located at the coal field, and uses Minto coal exclusively for steam power. In 1941 this plant produced 82 per cent of the 86,310,000 K.W.H. generated by the Power Commission¹, and accounted for 13 per cent of the 533,074,000 K.W.H. generated by all electric stations in the province.² More consumers of electricity in New Brunswick are dependent upon power generated from Minto coal than from any other source. The amount of Minto coal consumed in the Grand Lake power plant has increased steadily from 18,056 tons in 1932, to 80,311 tons in 1944.

The Provincial Government benefits directly from the coal industry through royalties on production which ranged normally in the pre-war period from \$35,000 to \$45,000 per annum.

BY COMMISSIONER MORRISON: Do you happen to know how much that is per ton?

DR. PETRIE: It is 10 cents per ton, I believe.

BY COMMISSIONER MORRISON: On all coal mined? We will get that from the Department.

DR. PETRIE continues brief:

In 1940 the total royalty receipts from coal amounted to \$50,161. Additional revenues are received by the province through personal taxation which is based ultimately, of course, upon taxpayers' income. The mining industry's payroll must contribute substantially to the provincial tax revenues.

It should hardly be necessary to point out the importance of the industry to national defence. But it is a fact which is often overlooked. Without the Maritime coal industry the

1: Annual Report of N. B. Electric Power Commission, 1941.

2. Central Electric Stations in Canada, 1941, Dominion Bureau of Statistics.

whole of eastern Canada would be dependent upon external and uncertain sources of supply for the one commodity upon which our whole armament program and railway transportation system are based. Furthermore, the Minto field is located inland and is therefore less vulnerable to enemy attack than other eastern coalfields; it is not only closer to consuming industries in New Brunswick, but is closer than any other field to the Quebec consumers. This situation alone provides an adequate case for the maintenance of the industry as an element of national policy.

C. THE ECONOMIC PROBLEM.

1. Nature of the Coal.

All of the coal mined from the Minto field is from a blanket or flat seam. An underlying seam is found in a few places, but it is of no economic importance. The seam lies in low and irregular folds, and is found in most parts of the coal basin. It is covered by shale or sandstone which forms the roof of the mines. It is underlaid by hard massive shale, and in some cases sandstone, below which there is a fairly compact shale.

Over large areas the seam lies comparatively near the surface, while in some parts of the field it has been mined at depths of 135 feet. Drillings indicate coal at depths to 180 feet. The seam is thickest in the North Minto section, where it averages from 22 to 24 inches. It carries a clay band, the position of which varies in different localities. In some mines it lies under from 4 to 6 inches of top coal and over 17 to 20 inches of bottom coal, while the position is reversed in other mines. Two mines have from 18 to 30 inches of clay overlying 18 inches of coal. When this thin seam in New Brunswick is compared, for example, with the 9 foot Number Two Seam at Springhill, N. S., covered by 3,800 feet of vertical overburden, it will be apparent that there are different mining problems in the two districts.

Generally speaking, Minto coals are well banded bituminous coals, with a predominance of bright coal. There is an appreciable quantity of visible pyrite. The ash and sulphur contents of the coal are comparatively high, with run-of-mine ash ranging from 13 to 19 per cent, and sulphur from 5.5 to 7.7 per cent. Volatile matter is relatively high. Typical analyses of coal as mined by the principal collieries are as follows:

Proximate Analysis (Dry Basis)

Mining Company	Ash	Volatile Matter	Fixed Carbon	Sulphur	B.T.U. per b.	Fusion Point of Ash °F.
	%	%	%	%		
Minto ¹						
A	16.2	31.3	52.5	6.9	12,760	1,950
B	14.9	30.7	54.4	5.8	12,840	1,982
C	16.9	31.3	51.8	6.7	---	2,000
D	13.1	33.4	53.5	6.0	13,230	1,975
E	15.3	31.3	53.4	7.7	12,850	2,010
F	15.6	31.3	53.3	6.1	---	--
G	12.0	36.2	51.8	6.6	13,440	--
Nova Scotia						
Dominion	8-9	33-35	55-58	2.5-3	13,850	2,050-2,150
Fairmont	8	37	53	2	13,900	2,050-2,150

1. Source: E. J. Burrough, R. A. Strong and E. Swartzman, "Washing and Coking Study of Coals from the Minto Coal Basin, New Brunswick," R.I.C.S. No. 48, Bureau of Mines, Ottawa, p. 4

Even though the coal is of comparatively high rank, its heating value is relatively low because of the high percentage of impurities. Its calorific value ranges from a low of 11,500 B.T.U. per pound for screenings, to 13,400 B.T.U. for lump coal, compared with Nova Scotia's Dominion and Fairmont coals, which average 13,850 and 13,900 B.T.U. respectively. First grade (7% ash) American bituminous averages about 14,000 B.T.U. per pound, and second grade (10% ash) American, which runs about 13,000 B.T.U.

The physical characteristics of this coal are not particularly good. It is highly fractured and therefore breaks down

readily on handling during mining, preparation, loading and shipment. This results in the production of a large quantity of slack. It is estimated that mining and simple preparation result on the average in the production of mine run coal containing about 66 per cent of $1\frac{1}{2}$ inch slack. This, along with the high sulphur content, results in a coal which is rather difficult to store without danger of spontaneous combustion.

Because of its chemical and physical properties, Minto coal in an unprocessed state has not been regarded as a good domestic fuel.¹ But screened lump is a good steam or locomotive coal. These factors have important bearing on the economic problem of marketing, which will be developed under that section of the submission.

2. Coal Reserves.

In 1923 W. S. Dyer, a member of the Dominion Geological Survey staff, estimated that the total of all coal reserves attributable to the Minto coal seam amounted to 235,200,000 tons.² This estimate includes three categories of coal, "actual", "probable" and "possible". Actual coal "is used to mean a quantity of coal that is certainly known to be present within a given area." It was estimated that the actual coal reserves, covering an area of 4.3 square miles, amounted to 8,200,000 tons.

Probable coal is used to mean "coal that has been tested at the outcrop, or that has been discerned in diamond drilling in areas that have not been systematically prospected by this means, or that is likely to occur in a basin beyond the limits of the areas of coal classified as actual." Probable coal was estimated at 61,000,000 tons, over an area of some 40 square miles.

-
1. A new type of heating unit has been developed which may change this situation. This point will be discussed under "Marketing".
 2. "Minto Coal Basin, New Brunswick," Memoir 151, Geological Survey, Department of Mines, Ottawa, pp. 26 - 27.

Possible coal "applies to areas where the coal is known to occur, but only as isolated outcrops or from occurrences in one or two bore-holes, or where insufficient prospecting has been done to raise the coal into the probable class." Dyer estimated the reserves of possible coal at 166,000,000 tons, over an area of about 105 square miles.

Over 9,000,000 tons of coal have been taken out of the seam since 1887, and over 6,000,000 tons since Dyer's estimate was made. Meanwhile a substantial quantity of reserves has been moved from the probable category to actual coal reserves.

A current estimate of probable and possible reserves made by the Provincial Geologist indicates 70,000,000 tons of probable coal, and 9,000,000 tons of coal classified as possible. No official current estimate of actual reserves is available. The New Brunswick Coal Producers' Association estimates that the actual reserves amount to some 25,000,000 tons. At an optimum annual output of 500,000 tons, which we believe should be normal, these reserves would give the mines another fifty years of operation.

A comprehensive drilling program is required in the whole field before coal reserves can be estimated accurately, and it is recommended that the Dominion Government carry out such a program. Up to this time the operators have done practically all of the drilling, and have spent in the vicinity of \$200,000 on it.

3. Capital Investment.

The capital employed in the Minto mining operations is relatively small, averaging \$1,299,000 in the period 1936 - 1942 (Table 5). This is accounted for by the fact that the seam lies so close to the surface. Unlike Nova Scotia, there is no deep shaft mining in the Minto field, involving heavy capital expenditure. In New Brunswick it has in most cases been more economical to sink shafts frequently and to move surface equipment to the new shafts as an area is worked out, rather than employ extensive underground development.

In recent years, because of deeper shafts, greater capital expenditures have been and will be required, as greater tonnage is taken from a single opening.

The low capital investment does not mean that mining machinery has not been used. Since 1932 all of the mines represented in this Association have been electrified (after the construction of the power plant at Grand Lake), in order that every advantage could be taken of mechanical equipment.

Various operators have been experimenting with different types of machinery for a number of years. Mechanization is difficult, however, because of the varying conditions found within a mine as it is worked. Equipment which is effective in one part of the seam may be quite unsuitable in another. It appears inevitable that heavier capital outlays must be made in the future. Deeper shafts must be sunk to smaller seams, involving more high head pumping, larger ventilation fans, and longer haulage systems, which will necessitate an increase in capital investment.

In terms of fixed capital employed per ton of coal produced, the Minto mines have employed much less capital than any other mining area in Canada (see Table 6). In 1939 the Minto operators used an average fixed investment of \$1.66 per ton of coal produced, compared with \$4.71 in Nova Scotia, \$3.90 in Saskatchewan, \$5.40 in Alberta and \$11.51 in British Columbia.

BY COMMISSIONER McLAURIN: Where does that come from?

DR. PETRIE: From the Dominion Bureau of Statistics, Coal Statistics for Canada. The citation you will see, I think at the bottom of Table 6. (Continues brief):

4. Nature of the Mining Operation.

Coal is mined in the Minto area by both shaft and stripping operations. The shaft operation is by far the more important, and since 1939 has accounted for 72 to 85 per cent of the total output (see Table 9). In the early days of mining all of it was done by hand pick work at shallow depths, by

the Room and Pillar Method. A small shaft was sunk and main entries were driven from it. Other entries were set off from these at right angles, and then others driven off from these, dividing the area into squares. Entry rooms were sectioned off at right angles to work out the square block of coal. These "rooms" were some 15 feet wide, separated by a 15 foot pillar. The separating pillars were worked out by the miners, thereby accounting for almost complete extraction.

In view of the fact that the coal seam is so thin, it is obvious that even for a relatively small output the area of a mine worked in this way would have to be rather extensive. In order to avoid long and expensive underground transportation systems the area mined out from one shaft tended to be rather small. It was cheaper to sink new shafts to operate areas contiguous to old workings. These areas seldom exceeded 700 feet in any direction from the shaft, and ordinarily covered a maximum area of 10 acres, containing normally about 30,000 tons of coal. Thus a new operation was begun for about roughly every 10,000 to 30,000 tons of coal produced. The operation was simple, and since it involved little machinery, the capital cost of opening new mines was low. This old system of mining is still in use in the smaller mines in the district where the seam lies near the outcrop.

Since these earlier days shafts and slopes have been sunk to develop extensive areas underground, increasing the production from a single shaft or slope up to 1,000,000 tons. These larger operations have involved for the most part long-wall advancing or retreating methods, with mechanical conveyors used for transporting the coal along the face, discharging it into mine cars which are moved by underground haulage to the bottom of the shaft or slope.

Shortwall and stall systems have also been used, employing machines especially designed and constructed by leading mining machinery producers for the peculiar mining conditions in Minto. It must be stressed that the use of a particular

type of mining machine presupposes the continuance of the conditions which it was designed to meet. This has not by any means been usual in Minto, and consequently the operators must improvise to meet changing conditions as they develop while working a particular area.

Open pit stripping has been used more or less continuously over a good many years. The low overburden areas have, however, been considerably depleted, and stripping is now being carried on where overburdens up to 35 feet are lifted. Drag-lines are used for all depths over 15 feet, and $3\frac{1}{2}$ and 6 yard buckets are used. The ratio of dirt moved varies from 15 to 20 yards per ton of coal. Generally speaking, the ground lends itself rather well to stripping operations, but difficulty has at times been encountered in the form of a heavy sandstone band. The climate is also a disadvantage to surface operations. Production falls when the ground is frozen, and particularly during periods of winter storms. This, of course, is the period when demand is highest.

5. Production.

The output of coal from the Minto field has increased from an average of 6,235 tons per year during the period 1889 - 1893 to a maximum of 547,064 tons in 1940 (see Table 7). The two great wars, causing a national fuel emergency, provided a strong impetus to coal production in Canada, which was shared by the New Brunswick industry. Average production from 1914 - 1918 was increased by 111,186 tons (200 per cent) over the average for 1909 - 1913. In 1918, the peak of wartime production, output was 281 per cent greater than in 1913, which had represented an all-time high. Although production levelled off after the war, it never again fell to its pre-war position. During the next decade it fluctuated from a low of 166,377 tons in 1919 to a high of 287,513 tons in 1922.

While production fell off somewhat during the first two years of the depression, the output in 1931, the lowest year

since 1926, was not seriously out of line with average output in the twenties (182,181 tons in 1931, compared with an average of 215,157 for the period 1920 - 1929). From 1931 production increased steadily and sharply until interrupted in 1937 and 1938 by a strike. This was largely the result of increased consumption of coal in New Brunswick by the railways, the pulp and paper industry, and the New Brunswick Electric Power Commission. This resistance to depression is in sharp contrast with the situation in Nova Scotia, as shown in the following figures:

Index Numbers of Coal Production in
New Brunswick and Nova Scotia,
1929 - 1935

<u>Year</u>	1929 = 100 <u>N. B.</u>	<u>N. S.</u>
1929	100	100
1930	95	89
1931	83	70
1932	97	58
1933	142	64
1934	144	90
1935	158	82

The 1939 output in New Brunswick for the first time exceeded 400,000 tons, and was 75 per cent greater than that of 1918, the peak production year of the last war. Had it not been for the strike in 1938 - 38, production in those years undoubtedly would have exceeded 400,000 tons. The impact of another war has again increasee output to all-time records. In 1940 production reached 547,064 tons. Thereafter it has fallen off because of labor shortage.

Compared with the trend in Nova Scotia, there has been a much greater relative increase in coal production in New Brunswick since the last war, and production has not suffered such serious cut-backs in depression years. New Brunswick production since 1919 has never fallen to the level of that year (see Chart 1).

Monthly production figures for New Brunswick during the period 1935 to 1944 are shown in Table 8 and Chart 2. The lowest production in this period was 12,172 tons in November 1937 (during a strike); the high point was 52,017 tons in October 1940. There is a marked pattern of seasonal variation in output, and there was a considerable spread from low to high, particularly prior to 1939. The following recapitulation of the figures indicates the high-low points during the period.

Maximum-Minimum Monthly Coal Output Data
in N. B., 1935 - 1944

Year	Maximum		Minimum		Ratio of Low to High
	Month	Output	Month	Output	
1935	Mar.	37,805 tons	July	22,069 tons	58%
1936	Feb.	39,476	Aug.	22,981	56
1937	Mar.	44,070	Nov.	12,172 (strike)	27
1938	Dec.	38,968	July	20,056	51
1939	Mar.	46,164	Aug.	34,523	76
1940	Oct.	52,017	Sept.	40,361	77
1941	Mar.	49,662	Nov.	35,672	72
1942	Aug.	42,440	Dec.	29,634	71
1943	Sept.	36,791	Dec.	29,006	78
1944	July	37,836	May	23,187	60

Normally the greatest output has been produced during the first quarter, while production fell to the lowest point during the third quarter. War conditions have changed this pattern entirely, due to the increase in stripping. During the past three years (1942 - 44) the greatest output was secured in the third quarter. In 1942 and 1943 the lowest production took place in December, a month which previously had stood high in output.

The better demand for Minto coal in recent years has resulted in more stability in monthly production, narrowing the gap between the highest and lowest months. Prior to 1939 lowest

monthly output ranged (exclusive of 1937, a strike year) from 51 to 58 per cent of the maximum output. Between 1939 and 1943 it ranged from 71 to 78 per cent, although the ratio fell off to 60 per cent in 1944. It is the hope of the New Brunswick operators that conditions in the future will enable the industry to maintain production on a relatively stable basis throughout the year, since this will benefit the workers substantially.

Prior to the war stripping accounted for only a small part of the total coal output in New Brunswick, although the relative increase in stripping output was somewhat greater than the increase in shaft production (see Table 9). In 1935 only 4.6 per cent (15,493 tons¹) of the total production was stripping coal. By 1939 stripping output had reached 71,169 tons, and accounted for 15.3 per cent of the total output. The demand arising out of the war has resulted in a much greater stripping output, which reached a peak of 112,922 tons in 1941 (21.2 per cent of the total output). Since then it has fallen, but not as much as shaft production, which is, of course, more dependent upon labor. The relative importance of stripping has, therefore, continued to increase, and in 1944 stripping accounted for 27.3 per cent of the total production.

The average output of coal per man day in New Brunswick is lower than in any other part of Canada (see Table 10). The figures published by the Dominion Bureau of Statistics show that the output per man day in the Minto field was 1.606 tons in 1942, compared with 2.080 tons in Nova Scotia, 3.629 tons in the bituminous mines of Alberta, 2.739 tons in British Columbia, and 2.795 tons in the whole of Canada. During the past nine years the output per man was never greater.

The average output per man day in New Brunswick is still smaller when stripping output is separated from shaft pro-

1. It should be noted that the figures on stripping production, provided by the N. B. Inspector of Mines, cover the fiscal

duction. No such figures are compiled by the Dominion Bureau of Statistics or the Dominion Fuel Board. But in the case of the seven largest operators--the members of the New Brunswick Coal Producers' Association--production per man day for shaft mining averaged 1.23 tons in 1943, and 1.13 tons in 1944. These figures represent a substantial reduction in output per man day compared with 1.37 to 1.45 tons in the period 1936 - 1938, when tonnage from stripping operations was small.

The major reason underlying the low output in New Brunswick is the thinness of the coal seam and the physical conditions of the strata, which preclude the continuous use of mechanical operations of the kind used in other coal mining districts.

While there has been a substantial loss in tonnage output over the past decade, it has not been as great as in Nova Scotia or Alberta (see Table 11). In 1936, 1937 and 1938 the loss in New Brunswick was 26, 22 and 33 per cent respectively, compared with 30, 23 and 37 per cent in Nova Scotia. During this period, despite a strike, most of New Brunswick's tonnage loss resulted from lack of orders. The percentage loss resulting from this factor ranged from 17.0 to 28.2 per cent between 1936 and 1938. In 1939, however, orders increased and tonnage loss was cut back sharply, and since the war began, losses from lack of orders have virtually disappeared. There was only a lack of orders loss of 1.8 per cent in 1942.

The most important factor contributing to wartime tonnage loss has been the shortage of manpower. There were fewer men employed in 1942 (1,033) than in any year since 1933, and in 1943 the number fell to 965. Had it not been for increased output per man day, due to stripping, production would have been considerably less than it was.

year, Nov. 1 - Oct. 31, and not the calendar year. The total production figures do not correspond, therefore, with the calendar year figures used elsewhere in this report.

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Coal Preparation

Until about twenty years ago there was, generally speaking, no preparation of the coal for market after mining. Most of the coal was shipped as mined. It is now screened, and refuse inherent in the coal seam picked out. Preparation in its simplest form consists of shaking the coal over a screen to separate lump from slack, but now and for some years past, by far the greatest percentage of coal is screened with modern equipment and is carried on picking belts where it is cleaned and loaded in cars.

The usual size of lump coal after separation is 15-8", $\frac{3}{4}$ " or 11 $\frac{1}{2}$ ". Various operators have attempted to increase domestic sales by the preparation of intermediate screened sizes, such as egg, stove and nut coal, but no significant results have been achieved. From 1938 to 1943 the shipments of nut coal never exceeded 7,100 tons (1939), and in 1942 only 2,287 tons of this grade were shipped.

Between 1937 and 1941 more lump coal was shipped than any other grade, with run-of-mine coal following closely (see Table 12). In 1939 over 36 per cent of the amount shipped was lump, 27.5 per cent was run-of-mine, and 23.3 per cent was slack.

BY THE CHAIRMAN: I wonder if you have any figures which show the comparative consumption by domestic users in the areas which might be served by Minto coal as compared with wood or any other fuel?

DR. PETRIE: We have later, sir, an indication of it. (Continues brief): Since the war, however, a larger percentage of run-of-mine coal has been shipped (41.7 per cent in 1943), while lump shipments fell to 27.4 per cent of the 1943 total.

BY COMMISSIONER MORRISON: What is the maximum lump that you get over a period of time?

DR. PETRIE: Perhaps Mr. Taylor could answer that better than I.

MR. TAYLOR: I don't think we have that broken down, but I would say about 50 per cent.

Q Would that be --?

A It depends of course on whether the $5/8$, $\frac{3}{4}$ or $1\frac{1}{2}$ screen is used. On the $5/8$ I would say roughly 70 per cent.

Q No, I was talking about the lump for domestic use, $1\frac{3}{4}$. What is the percentage?

A I don't think there has been any preparation of that kind. $1\frac{1}{2}$ is the highest.

MR. A. D. KING: The largest screen we use is $1\frac{1}{2}$. We have used $1\frac{1}{2}$, but the $1\frac{1}{2}$ is the largest we are using.

Dr. Petrie continues brief:

6. Cost and Price.

Table 13 shows comparative coal mining costs and revenues in New Brunswick, Nova Scotia, and Canada for the years 1939, and 1941 to 1945.

BY COMMISSIONER MORRISON: At that point, is that the actual cost as taken from the books of the companies, or did you again use Coal Statistics for Canada?

A Those costs were published by the Coal Controller's office for all the industries, not just the members of the Association.

BY MR. FRAWLEY : Those are the costs that emerge from the monthly reports made to the Coal Controller?

A I believe so.

Q On the Form F4A?

A I believe that is right.

Q They are no further investigated than that?

A No sir.

BY COMMISSIONER MORRISON: Are they still using F4A?

BY MR. FRAWLEY: I thought there was some discontinuance.

MR. TAYLOR: I believe so, but they still want them.

DR. PETRIE continues brief:

It is significant that in 1939 the \$3.426 cost per ton in New Brunswick was only 81 per cent of the cost per ton in Nova Scotia (\$4.206), and it was 5 cents lower than the average cost in Canada. This cost differential is of the

greatest importance to the New Brunswick coal industry. It is essential that it be maintained if the local coal is to compete successfully with coal possessed of a lower sulphur and ash content. Under the combination of the 1939 cost and price structure the New Brunswick industry just managed to show a profit, 2 cents a ton, after four successive years of substantial losses, ranging up to 16 cents a ton in 1938.

Labour is, of course, the most important element of cost in coal production, and it is relatively more important in New Brunswick than in Nova Scotia or in Canada as a whole. In 1939 labour cost in New Brunswick was 59 per cent of the total cost per ton, compared with 53 per cent in Nova Scotia, and 54 per cent in Canada.

Administration costs in New Brunswick are shown in Table 13 to be much higher than in Nova Scotia and in Canada. In the past the conclusion has often been reached that the New Brunswick industry is supporting a greater administrative load than is justified by the scale of production. The local situation that is not revealed in the cost distribution is the fact that for the most part the mine management in New Brunswick do the selling and marketing, as well as the ordinary administrative work. Part of these so-called administrative costs should be charged to distribution. When administration and distribution charges are added, the total shows the New Brunswick industry to be materially lower than either Nova Scotia or the average for Canada:

	<u>N.B.</u>	<u>N.S.</u>	<u>Canada</u>
Distribution, Administration and Miscellaneous Costs per ton (1939)	\$.363	.714	.518

BY COMMISSIONER MORRISON: What do you mean by miscellaneous costs?

DR. PETRIE: That was not explained in the data provided by the Fuel Board. It must be a very small item, however, because the others account for most of this charge.

BY COMMISSIONER MORRISON: Sometimes it is a pretty important fellow.

DR. PETRIE: Indeed, but relatively not so here. (Continues brief):

Thus the joint cost per ton of administration and distribution in New Brunswick in 1939 was only 51 per cent of these costs in Nova Scotia, and 70 per cent of the average in Canada.

Workmen's compensation costs per ton of coal produced in New Brunswick have been slightly higher than those in Nova Scotia and Canada, although in 1943 they were lower. It is hoped that they will be reduced in the future.

BY COMMISSIONER MORRISON: That hope of course is carried out by reducing accidents, I take it?

DR. PETRIE: Yes sir, and the costs are coming down, (Continues brief): In 1935, although the industry was assessed at the high rate of 6 per cent, a deficit of about \$50,000 had accrued against the class. At that time the operators inaugurated a safety drive in the mines which, with the miners' cooperation, reduced accident costs to the point where, despite larger compensation benefits, the class now has a surplus of about \$50,000. Benefits are also accruing to the operators in the form of lower rates, resulting in much needed cost reductions.

BY COMMISSIONER MORRISON: What is the rate now?

DR. PETRIE: Mr. Taylor, do you know what the rate is?

MR. TAYLOR: The whole Compensation Act in New Brunswick is being reviewed from a cost standpoint. We have been operating for the past two years under a provisional rate of 6 per cent, because we have this surplus in our account, then at the end of the year the Workmen's Compensation Board determines our cost for the year and reduces our cost for the year. It may be up to 20 or 50 per cent of the total, which may bring it down to a rate of $2\frac{1}{2}$ or 5 per cent this year.

MR. STREETER: I might add to that that this year the rebate coming to us reduced the rate to 3 per cent.

BY COMMISSIONER MORRISON: That is the lowest in Canada.

MR. TAYLOR: It will be, and I think that the benefits paid injured workmen are the highest.

COMMISSIONER MORRISON: Not quite. You can't claim that distinction.

DR. PETRIE continues brief:

Because of the small capital structure of the industry in New Brunswick, bond and general interest charges are low (1.5 cents as against 5.8 cents per ton in Nova Scotia, and an average of 3.4 cents in Canada in 1939). It should be pointed out that there is no bond interest included in the New Brunswick figures; those are just general interest charges. Furthermore, the New Brunswick mines are operated by individuals or private companies who have no outstanding interest bearing securities. The operators bear the entire risk themselves. In this connection, the average investment of over \$1,000,000 in the field would, if represented by bonds, form a part of the total operating costs, and therefore be recoverable through the existing subsidy. The New Brunswick industry has been forced to do without a return on the investment since it has been operating under the Coal Controller.

Power costs are also in New Brunswick relative to other sections of Canada. This is due to the limited need for pumping and power equipment for long hauls. But power costs increased by 100 per cent between 1933 and 1943 (see Table 14) and as more power will be needed for pumping and mechanical operations, the cost will rise still more in the future.

An analysis of costs of the New Brunswick industry for the period 1933 - 1943 is shown in Table 14 and Chart 3. Total cost per ton increased from 1933 to 1935 (chiefly because of increased labour costs), fell off in 1936, and settled at \$3.43 in 1939. From that time they have climbed rapidly, increasing by 36 cents in 1940, another 29 cents in 1941, 43 cents in 1942, and by 54 cents in 1943. Between 1939 and 1943 total costs per ton increased by \$1.62 (47 per cent). By far the greater part of this increase (78 per cent) has resulted from increased

labour costs, which were raised by \$1.26 per ton (65 per cent increase). There was another substantial increase in labour cost in 1944, when the National War Labour Board increased all wages by \$1.00 per day, along with one week's vacation with pay. The exact amount of the increase in the cost per ton of coal to the industry is not yet available, but it is costing the individual operators an additional 90 cents to \$1.00 per ton.

The cost of stores has been reduced since 1939, while rent and royalties, and workmen's compensation have remained at about the same level. As already indicated, power costs have gone up, and administration and distribution together were 13 cents per ton higher in 1943 than in 1939.

It is of the greatest importance to note that the gap between cost per ton in New Brunswick and Nova Scotia has been closing since the beginning of the war. In 1939 there was a difference of 78 cents per ton in New Brunswick's favor. By 1941 it was decreased to 60 cents, and to 49 cents in 1942. It increased again to 73 cents in 1943, due chiefly to a sharp increase in the Nova Scotia costs for stores and labour in that year, and a sharp decrease in taxes and insurance in New Brunswick. The \$1.00 per day increase ordered in New Brunswick in 1944 will result in a substantially greater relative increase in labour cost per ton than in Nova Scotia, due to the lower output per man day.

The major reason for the decreasing cost differential between the two provinces has been the relatively larger increase in labour cost in New Brunswick, as shown in the following figures:

	N. B.	N. S.	Canada
Increase in 1941 over 1939	\$.60	\$.37	\$.15
Increase in 1942 over 1941	.23	.28	.15
Increase in 1943 over 1942	.43	.51	.22
Increase in 1943 over 1939	1.26	1.16	.52
% increase 1939 - 1943	62%	51%	27%

Not only has labour cost in New Brunswick increased to a greater extent than in Nova Scotia, but it has been relatively more important in New Brunswick, and has become still more important during the war years, as shown in the following figures:

<u>Ratio of Labour Cost to Total Cost</u>	<u>N. B.</u>	<u>N. S.</u>	<u>Canada</u>
1939	59%	53%	54%
1941	64	56	58
1942	63	58	58
1943	65	58	58

This is a result of wage increases ordered by the National War Labour Board which in effect place the basic wage in New Brunswick at substantially the same level as that in other mining districts in Canada.

BY COMMISSIONER MORRISON: But, Doctor, you are not serious when you make that statement, are you?

DR. PETRIE: I believe that to be true, sir.

BY COMMISSIONER MORRISON: The differential of \$1 a day, if you were the recipient you wouldn't think you were getting substantially the same if you were getting \$1 a day?

MR. TAYLOR: I was just reading the thing. It is Eastern Canada.

BY COMMISSIONER MORRISON: That is not what it says.

BY MR. TAYLOR: I think the word Eastern should be in there.

DR. PETRIE continues brief:

The incidence of the wage increases bears more heavily on the New Brunswick industry than in Nova Scotia and other parts of Canada because of the lower production per man day in New Brunswick.

The War Labour Board recognized the economic implications of such wage equalization for the New Brunswick industry, and it was stated, "If present subsidies (arising out of wage increases) are converted into price increases that will mean a further price increase of about 70 cents per ton. If that takes place then the New Brunswick operator has something real to worry about. So has the New Brunswick Miner."¹

BY MR. FRAWLEY - Is that the occasion in which they granted an increase of a dollar per day plus a week's vacation?

A. Yes.

Q. Was it at that time the Nova Scotia increase was also granted, or were there two separate applications?

A. There were two applications.

Q. The same result as far as New Brunswick and Nova Scotia were concerned?

BY MR. TAYLOR - I might interject here, that there was a 20% increase granted in September.

Q. Of 1943?

A. Yes, by the National War Labour Board.

Q. On the application of?

A. Originally of Rothwell Mine Workers, I believe.

Q. And then the other one?

A. The other was applicable to the whole of the Minto field at that time. Then this other application was made, or was pending I am not sure, by the U. M. W. and when that case was heard a further dollar a day was given after that, as of December 20th, 1943.

BY THE CHAIRMAN - Does that mean there were three increases in that year?

A. There were two increases in that year.

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1. National War Labour Board, Re: Avon Coal Co., Minto Coal Co. Welton and Henderson Coal Co., G. H. King Coal Co., E. S. Crawford Coal Co., and United Mine Workers of America, District 26. (Feb. 15, 1944).

BY COMMISSIONER MORRISON - And still they are not any higher than your neighbors and competitors in Nova Scotia?

A. The original 20% was awarded by Mr. McTague for levelling up wages in Nova Scotia and New Brunswick, and the further application was by the U.M.W. for \$1.00 per day.

DR. PETRIE continues brief

Yet, notwithstanding this concession that wage equalization has very serious effects upon the New Brunswick industry, the Chairman of the Board ordered the wage increase, remarking, "We cannot see why he (the miner) should be dealt with in a strictly economic basis when that has now ceased to be a factor in the industry generally. It has really become the job of other agencies to adjust the economics of the coal industry".

The long-term price pattern of Minto coal has been one of gradual increase, marked by an all-time peak during the inflation following the last war, a subsequent levelling out, and then another period of increase after the depression which has now resulted in another price inflation in which the 1944 average was \$5.37 f.o.b. mines, a figure exceeded only in the 1920 post-war inflation (see Table 7).

BY COMMISSIONER MORRISON - Your clients are not seriously suggesting that \$5.37 is an inflated price for good Minto coal in this day and age?

A. It is a high price.

Q. I am reading your own language "an inflated price". I don't think it is enough.

BY MR. TAYLOR - We don't think it is either, but our customers dispute that fact with us.

BY DR. PETRIE - I think Sir, when you compare the pre-war price with what has happened it looks something like inflation.

BY COMMISSIONER MORRISON - We are not going back to the thirties, are we?

A. Go back to 1939 is all you need to.

DR. PETRIE continues brief

The average pre-war price of Minto Coal, f.o.b., mines, was considerably lower than that of Nova Scotia, and British Columbia coals, and similar to the price of the Alberta Bituminous coal. It was somewhat lower than the average price for all Canadian coal, including semi-bituminous and lignite.

The only Canadian coal competing with Minto comes from Nova Scotia, and comparative mine price figures for these two coals are important in view of the keen competition which prevails normally in the market.

In 1939 the average mine price of all Minto coal was only 79 per cent of the average in Nova Scotia, \$3,405 per ton compared with \$4,294. The price spread of run-of-mine and lump coal in the two provinces in 1938 and 1939 was as follows:

<u>Year</u>	<u>Mine Run</u>			<u>Lump</u>		
	<u>N. B.</u>	<u>N. S.</u>	<u>Difference</u>	<u>N. B.</u>	<u>N. S.</u>	<u>Difference</u>
1938	\$3.23	\$3.79	\$.56	\$3.82	\$4.58	\$.76
1939	3.02	3.76	.74	3.76	4.48	.72

Since 1939, when there was a sufficient price differential to enable Minto coal to compete with the better grade coal from Nova Scotia, the price differential has narrowed substantially, due to the closing of the gap between costs in the two provinces.

BY COMMISSIONER MORRISON - When you are quoting these prices Doctor, did you average all the Minto prices to arrive at that main price?

A. Those prices are the result of someone's average in the Bureau of Statistics.

Q. It was suggested to me at one time that there were various prices obtaining in the Minto coal field. Do you know anything about that?

A. I suppose there have been price differentials, yes.

Q. Within the field?

A. Yes.

BY MR. TAYLOR - Only on quality or size.

BY MR. MORRISON - That is not the difference I was referring to. I understand since that time they have a central selling agency, and they are to be commended for it.

BY MR. FRAWLEY - I don't think so.

BY COMMISSIONER MORRISON - They at least had reduced competition within the field.

BY MR. TAYLOR - There is no central selling agency in existence according to that term. There is one agent that acts as Sales Agent with the Railways and Power Commission, and all negotiations are done through him for the operators, at least for 80%.

Q. It has tended to cut out this out-throat competition among yourselves?

A. Yes.

BY MR. FRAWLEY - Who is the Agent?

A. Weaver Coal Company; not all of the operators, but they represent the largest part.

Q. The Weaver Coal Company carries on these operations in Montreal with the Railway Companies?

A. Yes, the Canadian National and the Canadian Pacific.

BY COMMISSIONER MORRISON - Are there signed agreements with them?

A. Yes.

BY MR. FRAWLEY - Have you those handy?

A. It is a letter written every year in confirmation of that.

Q. Is that letter in the custody of your Association?

A. It is done with the individual producer, by the Weaver Coal Company. We can get copies of those letters for you.

Q. Please do that.

DR. PETRIE continues brief

In 1941 the average price received by the New Brunswick operators was 94 per cent of the average price in Nova Scotia, \$4,170 as against \$4,445. In 1942 and 1943

there was an average difference of only 41 and 46 cents respectively.

The situation is shown more clearly in price figures for the two most important grades of coal shipped from the Minto mines - run-of-mine and lump.

<u>Year</u>	<u>Mine Run</u>			<u>Lump</u>		
	<u>N. B.</u>	<u>N. S.</u>	<u>Difference</u>	<u>N. B.</u>	<u>N. S.</u>	<u>Difference</u>
1939	\$3.02	\$3.76	\$.74	\$3.76	\$4.48	\$.72
1940	3.31	3.69	.38	4.14	4.66	.52
1941	3.90	4.11	.21	4.59	4.75	.16
1942	4.21	4.95	.74	5.06	5.01	.05

I would like to point out to the Commission that those prices are an arithmetic average of high-low prices and simply indicate trend; not accurate prices of the large industrial consumers. It has not been possible to get average prices for the various grades of coal from the Dominion Bureau of Statistics. They show high and low. I have done all I could to get those.

BY MR. FRAWLEY - You have all the information that the Bureau has?

A. Yes sir.

DR. PETRIE continues brief

The successive increases in prices and costs, resulting in decreasing the differential between the mine prices of coal in New Brunswick and Nova Scotia (eliminating it entirely in the case of lump coal in 1942), have very serious results for the New Brunswick industry. If such a condition is continued after the national fuel emergency has passed, the New Brunswick industry cannot survive. A substantial price differential must exist if the consumer is to be induced to burn the high ash and sulphur New Brunswick coal. Furthermore, the price spread must be greater than the actual difference in the inherent heat value of New Brunswick and Nova Scotia coal. The geographic advantage of the Minto field for supplying the New Brunswick market has been wiped out by very low freight rates

on competitive coal moving into the New Brunswick market, and the price differential necessary to enable Minto coal to compete has to be reflected in the price f.o.b. mines in the Minto area.

In the eleven year period 1933 - 1943 the New Brunswick coal industry showed an operating loss in six years, a profit in five. In the pre-war period profits fell from 14 cents to 3 cents a ton (1933 and 1934), and then in four successive years the industry operated at a loss which reached a peak of 16 cents per ton in 1938. In 1939 a profit of 2 cents per ton was made, and this was maintained through 1940. By 1943, however, despite very high average prices, the greatly increased costs resulted in an operating loss of 16 cents per ton (see Table 14 and Chart 4), which follows this page.

During the pre-war period (1933 - 1939) the industry lost \$65,875, or 2.6 cents per ton. Since the war another \$31,390 has been lost, making a total loss of \$97,265 for the eleven year period. It should be stressed again that these losses were incurred without any interest being charged against invested capital.

In summary, it should be noted that the production of shaft mined coal is now much lower than it was in 1941. The principal causes for this marked decrease have been a reduction in the number of miners available, coupled with reduced output per man day. Furthermore, in several mines much more difficult and therefore more expensive underground working conditions have been encountered because the more readily accessible coal has been exhausted.

As a result of these conditions there has been a marked increase in cost per ton over and above the increase caused by the payment of higher wages. Wages and prices are, of course, frozen. Revenue is derived from two sources - sales of coal and subsidy. At some mines the revenues received have been insufficient to pay all costs, so that those mines have in past months been worked at a loss. It is apparent that they will be unable to continue in operation without an increase

in revenue from one source or the other.

BY THE CHAIRMAN - Are there any mines in the country running with a loss now? Do they not all get assistance to equalize the difference between operating costs and sales?

A. I understand in some cases it is not great enough. Because here we have a funded debt and therefore cannot charge the interest on that into our cost structure, and our subsidy does not give us that money, whereas in other areas you build your interest in the cost structure and get a guaranteed return by the Government in your investment. We cannot get that.

BY MR. TAYLOR - Up until March 30th, and I will perhaps ask here for someone to check me, up to March 30th, 1944, our losses were taken care of by the Emergency Coal Production Board on a cost basis. On an absolute loss basis. After April 1st the Emergency Coal Production Board put \$1.00 per ton as the limit of assistance given to any mine. The meaning of that paragraph is that in some cases in the Minto field the \$1.00 per ton is not sufficient to pay the losses, and further assistance will be needed or these mines will have to be closed.

BY MR. FRAWLEY - Is the door closed to further application for adjustment?

A. It is closed, but I don't know how tight it is closed. We would like to try and open it again.

BY COMMISSIONER MORRISON - Have the auditors been in?

A. Yes, I think practically every company there has had their 1944 audit.

Q. Perhaps when he goes back it will be better or worse?

BY MR. FRAWLEY - You say, they say they will give you so much?

A. Up to March 31st, 1944, they had a production loss subsidy that is from the Emergency Coal Production Board. Since then the limit of the subsidy that they allow is \$1.00 per ton.

BY COMMISSIONER McLAURIN - Did not the previous subsidy guarantee a certain amount of profit per ton?

A. It guaranteed a profit of 15¢ per ton, or whatever the standard profits were, during the basic period for standard

profits; the maximum profit was \$5,000. a year. If they could not establish standard profits during that basic period.

BY THE CHAIRMAN - Then it is not accurate to say it is owing to your capital set-up that you are in this position?

A. No, there are other factors too.

DR. PETRIE continues brief

7. The Market

The nature of Minto coal has limited its distribution for the most part to the industrial and railway market. Table 17, based on coal sales of five leading operators, shows that in the period from 1938 to 1944 there were from 12,496 to 23,911 tons sold for domestic and institutional consumption. The relative importance of this tonnage ranged from 4 to 7.3 per cent of the total sales of these companies. All of the rest was sold for industrial and railway use.

BY MR. FRAWLEY - You say the nature of the coal brings that situation about. You mean the nature of the coal without any beneficiation?

A. Yes.

BY MR. TAYLOR - Outside of the screened.

DR. PETRIE continues brief

New Brunswick is the natural market for Minto coal, and most of it is sold within the province, as shown in Table 15 and in the following tabulation:

Sales of Minto coal in Tons., 1938 - 1943.

Year	N. B.	% of Total	Quebec	% of Total	Maine	% of Total	Ratio N.B., P.Q. Maine to Total
1938	283,197	84.8	29,796	8.9	18,837	5.6	99.3
1939	385,453	83.4	48,580	10.5	25,432	5.5	99.4
1940	451,351	84.5	53,745	10.1	26,186	4.9	11.5
1941	432,883	84.5	39,750	7.8	37,682	7.4	99.7
1942	390,507	91.5	6,384	1.5	29,875	7.0	100.0
1943	327,998	90.1	5,914	1.6	29,727	8.2	99.9

In 1939 some 83.4 per cent of the sales were made in New Brunswick, and this ratio has increased during the war, due

principally to the sharp reduction in sales to Quebec. The pre-war market in Quebec resulted from the federal policy of assisting the Canadian coal industry by paying subventions on inter-provincial coal movements. Under this policy Minto coal shipments to Quebec rose from 11,101 tons in 1934 to a peak of 53,745 tons in 1940, although the movement of New Brunswick coal under the subvention has been relatively small, and has cost the Dominion Government only \$221,706 since 1928. Only 290,849 tons have moved under this arrangement in sixteen years (see Table 16).

The Maine market has been relatively firm over the past six years, and it is an important market for Minto slack. Between 1938 and 1943 from 72 to 93 per cent of the coal shipped to Maine was slack, used by the pulp and paper industry. Maine has recently been taking from 20 to 25 per cent of the total quantity of Minto slack that has been sold.

BY MR. FRAWLEY - That has no tariff obstacles at all?

BY MR. STREETER - No sir.

Q. Was there before the war?

A. There was before the war, some years before the war.

BY COMMISSIONER McLAURIN - In 1932 or thereabouts?

BY DR. PETRIE - Yes.

Q. I take it that the industry is anxious to maintain or expand the Maine market?

A. Yes.

Q. You do not want that invaded by any other industry demanding higher tariffs against American coal?

A. We don't want to lose that market.

Q. You have not answered my question, but I will not press for an answer.

BY MR. FRAWLEY - Yours is the nearest coal supply to this American operation?

A. Yes.

Q. And you have successfully entered that market?

A. Over a period of years.

BY COMMISSIONER MORRISON - Strictly on a competitive basis?

A. Yes.

BY MR. FRAWLEY - Does the Streeter Company enjoy the Maine market?

BY MR. STREETER - Yes.

DR. PETRIE continues brief

The New Brunswick Market - Normally the two Canadian railroads constitute by far the most important part of the provincial market, and the industry is virtually dependent upon the railways for its existence, in that they furnish the only substantial market for the larger sizes of lump coal.

Beginning in 1932 the Canadian National Railway substantially increased its tonnage of lump coal taken from the field, and in 1940 purchased 160,940 tons from the seven largest operators, compared with 106,314 tons in 1938. At the same time the C.N.R. agreed to take this increased tonnage in about equal quantities monthly, thus enabling the operators to improve their summer operating position which previously had been at a low level. The operators were also able to plan their sales of slack coal derived from screening for the railway, and secure markets for their slack, knowing in advance what tonnage would be available each month.

The increase in regular monthly sales to the C.N.R. has been of great assistance to the industry, and it is absolutely essential that this business be retained.

The following figures show the purchases of Minto coal by the two railroads from 1934 to 1943 (the approximate consumption of each railway is shown in Table 18). Which table is on the bottom of page 56.

You will see the split from these leading operators because the Dominion Bureau of Statistics does not break it down by railways, and we took the sales of the members of our Association and gave you those particular figures.

S.

-1330-

Dr. J. R. Petrie

<u>Year</u>	<u>Railway Purchases</u>	<u>Per Cent. of Total Sales</u>
1934	154,851 tons	50.3%
1935	177,351	52.0
1936	175,797	49.8
1937	159,772	44.9
1938	138,611	45.4
1939	178,830	63.3
1940	200,539	52.2
1941	172,153	38.1
1942	138,807	32.1
1943	104,488	26.6

BY COMMISSIONER MORRISON - The percentage going down from 50.3 to 26.6. I take it the reason is that you were not able to supply them? No fault of the railway?

A. It is true that production has fallen off due to man power. No fault of the railways.

BY MR. FRAWLEY - Are you dealing with the difference between the two railways' purchases?

A. I don't think we have made any specific comment on it.

DR. PETRIE continues brief

During the pre-war years, railway sales accounted for 45 to 63 per cent. of the total sales, but since 1942 there has been a sharp cutback in the amount sold to the railways, despite the increasingly large quantities of coal consumed by them. In 1943 the railways purchased less Minto coal than in any of the pre-war years examined, while purchases of Nova Scotia coal for railroads in New Brunswick have increased sharply, as shown in the following figures:

Railroad purchases of N. B. and N. S.
Coal in New Brunswick, 1937 - 1942.

<u>Year</u>	<u>N. B.</u>	<u>N. S.</u>	<u>Ratio N. S. to N. B.</u>
1937	159,772 tons	105,420 tons	65.6%
1938	138,611	110,303	79.1
1939	178,830	104,215	58.1
1940	200,539	157,626	78.6
1941	172,153	334,547	194.8
1942	138,807	336,326	241.7

BY COMMISSIONER MORRISON - They had to get it some place; they had to have it.

A. But again there is another factor which we will discuss in the next section.

DR. PETRIE continues brief

Most of the Minto coal purchased by the railways is lump (see Table 15), and the average price of Minto lump, f.o.b. mines, in 1941 was nearly as high as the price of Nova Scotia lump, and was 5 cents per ton higher in 1942. It is obvious that if this situation continues to exist after the war, Minto coal simply cannot compete on such a price basis, and this most important segment of the market will be lost in large part unless a readjustment of prices is made possible.

BY MR. FRAWLEY - How do you arrive at that conclusion?

A. Because on the basis of the two coals, where the Minto coal has a high ash content and a high sulphur content, I don't see how, if you can get better coal for the same price, the people will buy Minto coal.

Q. That applies to American coal in addition to Nova Scotia?

A. But Nova Scotia is the big competitor in this railway market; they are our big competitor here.

Q. Is not American coal a competitor?

A. Not to the same extent.

BY MR. TAYLOR - In as far as the railways are concerned, not in normal times.

Q. But coal can come in by water from American ports?

A. It can move in, yes.

Q. Is that not a potential competitor in peace time, of this New Brunswick coal, and also a competitor of the Nova Scotia coal?

A. Yes.

BY THE CHAIRMAN - I doubt very much if there is much American coal coming into St. John in peace times.

BY MR. STREETER - I think in answer to Mr. Frawley's question, the higher the price that has to be maintained because of these reasons, for New Brunswick coal, the more competitive United States coal will become.

Q. May I ask you this Dr. Petrie. You say your coal will not compete with Nova Scotia coal?

A. It will if there is a price control.

Q. And if you improved its quality by taking out some of the ash, then it would cost more?

A. Yes.

Q. And would be about the same result?

A. I am not so sure of that.

Q. You are comparing them just as they are, without any beneficiation by either?

A. Yes.

BY COMMISSIONER MORRISON - It would cost Nova Scotia something to put it through too?

BY COMMISSIONER McLAURIN - And that would put them in about the same position?

BY THE CHAIRMAN - But at the same time I don't think it is very encouraging to anybody who suggests that if these conditions exist after the war that Minto coal cannot compete and therefore must go out of business. That is practically your conclusion?

A. That is my opinion.

Q. You competed successfully and had pretty good times here before the war?

A. With the price differential. That has practically disappeared now.

Q. Is that not due to the war?

A. Yes, and what we are praying for is that it will be restored to its pre-war condition.

BY COMMISSIONER MORRISON - Now Doctor, what do you and those whom you represent mean by you are hoping and praying that you are going back to that position?

A. We have in the back of this report a recommendation which I think will go to that later.

Q. Perhaps we can discuss it then.

DR. PETRIE continues brief

The Grand Lake Plant of the New Brunswick Electric Power Commission is another major market for the Minto industry. Consumption of Minto coal in this plant since 1937 has been as follows:

Minto Coal Consumed by the N. B. Electric
Power Commission's Grand Lake Plant

<u>Year</u>	<u>Tons Consumed</u>	<u>% of total Minto Sales in N.B.</u>
1937	33,567	11.1
1938	26,403	9.2
1939	27,486	7.0
1940	47,229	12.2
1941	55,059	12.1
1942	60,537	14.1
1943	64,358	16.4

There has been a steady increase in sales to the Power Commission since 1938, and the 1943 sales were 36,872 tons (134 per cent.) greater than in 1939. The ratio of Power Commission sales to total sales in the province increased from 7 per cent. in 1939 to 16.4 per cent. in 1943.

It is of the greatest importance that the industry not only retain this market, but receive the benefit of any further extension of steam generating capacity in the province. Here again price is of the greatest importance, since Minto coal must compete on the basis of available B.T.U. in the fuel. The urgent need for cheap electric power in New Brunswick is incompatible with the

present price of Minto coal in relation to the price of alternative fuels for the generation of power.

The pulp and paper industry provides the other important market for Minto coal, and its relative importance is shown in a sample market analysis, based upon the sales of six of the largest operators in the district, who sold from 80 to 90 per cent. of all the Minto coal sold in the New Brunswick market between 1939 and 1943. The following figures show the relationship between the sales by these operators to the pulp and paper industry in New Brunswick and their total sales from 1938 to 1944.

New Brunswick Sales of Six Large Minto
Operators, 1938 - 1944.

<u>Year</u>	<u>Total Sales</u>	<u>Sales to N. B. Pulp & Paper Industry</u>	<u>% of Total</u>
1938	222,257 tons	45,823 tons	20.7%
1939	341,844	118,080	34.5
1940	392,037	110,701	28.3
1941	376,581	107,468	28.4
1942	346,066	113,896	32.7
1943	297,817	114,729	38.6
1944	273,988	106,650	39.1

Assuming that the sample is representative of the sales of the entire coal industry, (and I think it is about) about one-third of all the Minto coal sold is normally used by the pulp and paper industry. In 1943 and 1944 this market became relatively more important, due to the decrease in total output and sales. In 1943, the sales of these six operators to the pulp and paper industry in New Brunswick were greater than the total sales of the industry to the railroads. Yet the tonnage taken by the pulp and paper industry has fallen during the war, and in 1944 it was only 90 per cent. of the 1939 figure. The relatively sharp decrease from 1943 to 1944 reflects the effect of the high price of Minto coal, stressed previously in this submission. In 1944 the New Brunswick industry provided only about 50 per cent. of the coal consumed

by the pulp and paper industry.

This tonnage loss can be regained and the additional part of the market served only by a resumption of the price differential between New Brunswick and Nova Scotia coals which existed prior to the war. This price differential can be maintained only if the pre-war wage differential is maintained, along with equalization of freight charges, a matter which will be discussed presently.

The chief centres of the New Brunswick market are shown in Table 18. Dalhousie, Edmundston, and Bathurst, all pulp and paper centres, the Grand Lake Power Plant, and the Saint John-Fairville industrial centre absorb most of the Minto coal that is not taken by the railways. In 1939 these centres absorbed 87 per cent. of the total provincial sales of Minto coal, exclusive of railway and Power Commission sales.

The apparent consumption of coal in New Brunswick is shown in Table 19. The total tonnage available for consumption increased from 863,296 tons in 1938 to 1,598,082 tons in 1942, an increase of 85 per cent.

Prior to the war the New Brunswick mines normally supplied more than one-third of the coal consumed in the Province. In 1939, for example, 38.8 per cent. of the total was supplied from Minto, in competition with Nova Scotia, and to a much lesser extent with the United Kingdom and the United States (see Table 20, where you will see the imports from the United Kingdom and the United States, and there was a very small movement at one time from Germany). During the war, however, several factors have squeezed the New Brunswick operators into a smaller portion of the provincial market.

The total tonnage of imported coal has decreased since 1940, and was lower in 1942 than in 1939 by 11,743 tons. But Nova Scotia, losing a large part of its Central Canadian market because of war-time shipping conditions, has necessarily looked to the New Brunswick market as an outlet. Shipments of Nova Scotia coal to New Brunswick and Quebec since 1937

have taken the following course:

<u>Year</u>	<u>N. B.</u>	<u>Quebec</u>
1937	627,725	3,336,001
1938	534,549	3,057,995
1939	579,619	3,498,037
1940	749,290	3,322,525
1941	1,102,524	2,079,875
1942	1,178,448	1,662,120

With better grade Nova Scotia coal available at similar prices to Minto coal, the New Brunswick sales of Minto coal have fallen relative to the total sales of coal in the Province. In 1942 Minto coal supplied only 24.5 per cent. of the New Brunswick market, as compared with 38.8 per cent. in 1939.

It has already been indicated that the nature of Minto coal has mitigated against its general use as a domestic fuel. In recent years from 4 to 7 per cent. of the sales have been for domestic and institutional use, and most of this quantity has been burned in hospitals and public buildings for raising steam. It can be used with good results in furnaces with proper stoking facilities, but it is unlikely that even a large increase in stoker installations would affect the domestic market to any appreciable extent.

BY MR. FRAWLEY - Why?

A. Because of the relatively small number of houses in New Brunswick which burn coal, as we point out presently.

DR. PETRIE continues brief

A new development has taken place, however, that is worth mention. A heating unit called the "warm morning heater" has been developed recently. Several of these stoves have been installed in the Minto district, and they have so far given such remarkable performance that it is felt that their general use would result in an increase in demand for Minto coal for domestic use. Undoubtedly a furnace on the same

principles will be produced. It is possible, therefore, that the domestic demand for Minto coal may increase, but only if the price is competitive.

Yet the overall domestic market for coal is limited by competing fuels. The 1941 Census reports that there are 91,894 occupied buildings in New Brunswick. Of these, 69,380 burn wood, so that 22,514 are left for coal, coke, fuel oil or natural gas. In the City of Moncton natural gas is used to a large extent. It has been estimated that the quantity of gas burned there is the equivalent of 32,000 tons of coal. This means that about 5,000 buildings are removed from the potential domestic coal market, leaving 17,514.

The average consumption of anthracite in New Brunswick amounts to some 80,000 tons annually (see Table 20), which would heat an estimated 12,000 buildings. Thus only 5,514 are left as a domestic market for bituminous coal, coke or fuel oil. It is obvious, then, that under the best of conditions there cannot be an important domestic market for Minto coal in New Brunswick.

BY THE CHAIRMAN - Until the forests burn down.

A. We do not plan on them burning down. We plan on conserving them.

BY MR. FRAWLEY - They are going to stop burning up that wood and make things out of it.

A. We hope so.

DR. PETRIE continues brief

8. Processing and By-Product Possibilities

At various times since 1912 samples of New Brunswick coal have been examined at the Fuel Research Laboratories of the Bureau of Mines, Ottawa. In 1923 the first systematic study was made of the coal in the Minto area to determine the quality of coke produced, and the results were reported in Investigations of Fuels and Fuel Testing, 1923. Large scale coking tests were made under the auspices of the Dominion Fuel Board in the Somer-Solvay ovens of the Hamilton By-product Coke Ovens Ltd.

The results of this test, along with a washing test are reported in Investigations of Fuel and Fuel Testing, 1924 (B. F. Hainel and R. E. Gilmore). In 1929 further tests were made with a view to the possible establishment of a low temperature carbonization industry in New Brunswick. In 1939 and 1940 another detailed test program was carried out in connection with coking, and the results published in R. I. C. S. No. 148, "Carbonization Tests on Washed New Brunswick Coals by the Curran-Knowles Process at the Plant of the Public Utilities Commission, Owen Sound, Ontario". (June 19, 1940).

The operators and the New Brunswick Advisory Board for Economic Development have given careful consideration to the advisability of washing the coal in order to improve its marketability. It is doubtful if such a plan would prove sound economically. The Fuel Research Laboratories reported, after extensive tests, that "the coals appear difficult to wash, and in most cases the reduction in the impurities obtained by washing is insufficient to warrant the installation of expensive cleaning or washing plants". (R.I.C.S. No. 48, p. 43)

BY MR. FRAWLEY - You don't mean 148 there, do you?

BY MR. TAYLOR - I think it is 48.

BY MR. FRAWLEY - That must have been some time ago; they are up to 195 now.

DR. PETRIE continues brief.

Coking tests under both high and low temperatures indicate that a satisfactory domestic coke can be produced from Minto coal, but it contains more sulphur than Nova Scotia coke. The important point concerning the coking of this coal is not whether it can be done, but whether it can be marketed. Dosco coke, which is of better quality than the coke produced from New Brunswick coal, has been on the market for a long period of years. While no figures on coke consumption are available, it is doubtful if in normal times more than 10,000 tons are sold in the entire province. It seems certain that if any substantial market for coke existed in New Brunswick, the Dominion Steel

and Coal Company would long since have exploited it fully.

BY THE CHAIRMAN - Was the report of those various investigations and inquiries regarding your coal, do the reports indicate, or the results of the investigations indicate that the coke from your coal could be made a good domestic coke?

A. Yes sir.

Q. Without any additions to it?

A. The results as I remember them show a suitable domestic fuel. It has higher sulphur than the Nova Scotia coke, but can be used as a domestic fuel.

Q. Does that mean that it is a fair fuel?

A. A fair domestic fuel is what I believe the investigators would say.

BY COMMISSIONER MORRISON - But not as good as Dosco?

A. No.

BY MR. FRAWLEY - There is something furnished recently about that. I have wired about it to Ottawa and I may be able to put in the record a comparison of Minto coke, American anthracite and Dosco coke.

BY COMMISSIONER MORRISON - It might change the Minto complex.

DR. PETRIE continued brief

9. Freight Rates

It has already been pointed out that, unlike the Nova Scotia industry which markets its coal throughout Eastern Canada, the New Brunswick coal industry must depend primarily upon the New Brunswick market. The Minto-Chipman district has no water transportation outlet, so that all of the coal must be moved over one or the other of the two railroads. A considerable portion of it moved over both of them, since most of the operators are located on C.P.R. spurs and market most of their coal in areas served only by the C. N. R.

The movement of Minto coal into other provinces is restricted by a structure of rail freight rates so high in comparison with water rates that it cannot compete in Ontario

or Quebec (except in the Eastern Townships) with Nova Scotia coal shipped into these provinces by water and then reshipped to destination by rail. It is true, of course, that a small tonnage of New Brunswick coal has moved to Quebec under subventions (see Table 16), but most of these shipments have been to the Eastern Townships district.

It has been shown that Minto coal supplies only a small part of the total coal consumed in New Brunswick (see Table 19). The major factor which has operated against the New Brunswick industry in its own market is the fact that Nova Scotia coal moves into New Brunswick at substantially the same freight rates as are applied to New Brunswick coal moving to the same distribution points, despite the materially longer hauls for Nova Scotia coal.

A few of the freight rates which are now in effect on the movement of coal from the Minto-Chipman district to points in New Brunswick, compared with the rates on Nova Scotia coal to the same points, are indicated in Table 21. (That is the last table in the report, page 59). A summary of some of these comparative rates to the most important coal consuming centres in New Brunswick is as follows:

Destination	<u>Rate per Ton Mile</u>			
	C.P.R. ex Minto	C.N.R. ex Hardwood Ridge	C.N.R. ex Springhill Junction	C.N.R. ex Sydney
	\$	\$	\$	\$
Bathurst Spur	.0065	.0052	.0042	.0035
Dalhousie	.0056	.0047	.0044	.0035
Saint John	.0090		.0055	.0044
Mayrsville	.0257	.0177	.0077	.0050
Edmundston	.0055	.0066	.0040	.0035

BY THE CHAIRMAN - Is there a suggestion that the freight rates are not comparable as between Nova Scotia and New Brunswick?

A. Yes.

Q. That is one of the reasons we have Mr. Rand Matheson with us.

A. Right.

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DR. PETRIE continues brief

On a basis of freight per ton, some of the rates from Springhill Junction, Nova Scotia, are lower than rates from the Minto field to the same points in New Brunswick, as shown in the following figures:

Destination	C.P.R. ex Minto	Mileage	C.N.R. ex Springhill Junction	Mileage
Bathurst	\$1.10	169	\$0.80	188
Campbellton	1.50	234	1.20	253
Dalhousie	1.30	231	1.10	250
Saint John	0.90	101	0.85	155

These figures do not include the long spur haul from the Minto fields which will run 40 to 50 cents a ton; so they are really higher than are shown here.

BY THE CHAIRMAN - By the way, those conditions did exist before the war?

A. Yes.

Q. Was there ever any case made to the Transportation Commission?

A. More than one case, I believe, has been prepared. There was one in 1938, that was to the Fuel Committee, but no action was taken.

Q. I mean to the Board of Transport Commissioners?

BY COMMISSIONER MORRISON - Have the operators of the Minto field gone before the Board of Transport Commissioners?

BY MR. FRAWLEY - The Transport Board does not care if these industries are charged those low rates.

BY THE CHAIRMAN - What about the high rates?

BY MR. TAYLOR - We are ^{not} complainant about high rates.

BY MR. FRAWLEY - About the low rates that the Nova Scotia coal gets, and I say the Board of Transport Commissioners are not concerned. If the Railways want to charge a little, they are not there to prevent them. They do not call that discrimination.

BY THE CHAIRMAN - What do they call it?

BY MR. FRAWLEY - What Commissioner Morrison asked was to

what extent has this been tried to be fought out before the Board of Transport Commissioners to see what they would do.

BY MR. TAYLOR - The answer to that, the general procedure has been gone through with the freight commissions of both railways and it has been discussed informally ten or twelve years ago with the old Railway Board, and in 1938 we prepared the best case we could and took it before the Dominion Government because we were told we would not get any place with the Board of Railway Commissioners. We thought we were getting something that time and we arrived home, but nothing was done.

BY MR. FRAWLEY - You are not asking that anything be done to your own rates, but literally asking that the Nova Scotia rates be increased?

A. No.

BY COMMISSIONER McLAURIN - The Board of Transport Commissioners could reduce the rates so you would have a parity.

BY MR. TAYLOR - I think as Dr. Petrie goes along it will come up.

BY COMMISSIONER MORRISON - Have you ever discussed it with the railways?

A. We have, and we have met with some success. The Railways' argument is that the rates for coal are costing service rates.

Q. Plus.

A. That if they were lowered, and in some cases they were lower than cost of service rates.

Q. Plus, I say.

BY MR. FRAWLEY - Based on cost of service rates.

MR. PETRIE continues brief

It can be seen from these comparisons that the rate structure applied to the movement of coal from Nova Scotia to New Brunswick bears no relationship to the cost of service.

When it is remembered that most of the mines are located on C. P. R. spurs, it will be seen that despite the shorter haul to the important New Brunswick consuming centres on the C. N. R., they are forced to pay a higher freight rate

than competing coal from Nova Scotia. The economic consequences of such a freight rate structure must be obvious.

Another important feature of the transportation system in the Minto field is the structure of switching charges between railways. While it may seem that the field benefits from service by two railways, it should be understood that no such advantage actually exists.

The first railway connection to the Minto field was made nearly forty years ago, when the New Brunswick Central Coal and Railway Company, connecting with the C. N. R. at Norton, was extended into the Minto field. This railway was constructed with the assistance of government subsidies, and its extension into the coal field reflected government policy of assisting in the development of the Minto-Chipman coal mining area. Included in the railway construction program was the construction of spurs into the mines themselves.

This railway system, operated under a Commission appointed by the New Brunswick Government, was the only railway transportation to the field for several years. About 1912 the Fredericton and Grand Lake Coal and Railway Company was built from Devon, N. B., to the scales siding about three miles west of Minto, where it met the tracks of the New Brunswick Central Coal and Railway Company.

(You can see those rails that I am discussing in the map. This is just in the field itself but it will show you the connections).

The coal area development policy of the provincial government was reflected again in this case, where the Province guaranteed the bonds issued to construct the railway.

Shortly after the Fredericton and Grand Lake Railway was completed, both of these systems were taken over by the C.P.R. under long term lease. Since the C.P.R. has taken over the operation of these two railways, including the mine spurs, various items of cost formerly met by the New Brunswick Central Coal and Railway Company have had to be

assumed by the mine operators. These items include building and maintenance of mine spurs and sidings, and the payment of rail rental on these spurs, as well as extra switching charges.

BY MR. FRAWLEY - Has not the C.P.R. bought the railway?

A. Leased. I think it is a 99 year lease.

BY MR. TAYLOR - I think the New Brunswick Central and is 999, and the Fredericton-Grand Lake 99.

BY COMMISSIONER MORRISON - And the Province guaranteed the bonds, and what happened to that part of the deal?

A. You will find in the Public Accounts of New Brunswick a statement of railway bonds guaranteed, I think they occur regularly. That can be checked.

BY MR. FRAWLEY - Are you explaining it further on, or is that all you say about it?

A. Probably that is about as much as we say.

BY RAND MATHESON - You mean there is no interchange of facilities between the two railways, and there are also privately owned spurs. The Canadian National locomotives can operate over the C.N.R. spurs and some of the privately owned spurs, and the C.P.R. locomotives can operate over the C.P.R. spurs and some of the privately owned spurs, but the C.P.R. cannot make an interchange with the C.N.R. or the C.N.R. cannot interchange with the C.P.R.

BY COMMISSIONER MORRISON - Were they able to do that would it benefit the industry?

BY MR. TAYLOR - We believe so.

BY COMMISSIONER MORRISON - Have you ever appealed to the Board on that point?

A. No, that was the crux of our 1938 case.

BY MR. MATHESON - The matter has been under consideration by the Coal Control from the recommendation of 1942, and there is also an application to the Board of Transport Commissioners.

BY COMMISSIONER MORRISON - You are suggesting that it has been under consideration for two years?

A. The Coal Control has it under consideration.

BY COMMISSIONER MORRISON - It should be well considered by now then.

DR. PETRIE continues brief

The next change in the coal field transportation system took place in the early twenties, when the C.N.R. built a six mile spur from Hardwood Ridge on the Transcontinental Division to the mines of the Minto Coal Company in the North Minto district. This spur also serves the mines of the Miramichi Lumber Company. (The spur is shown on the map).

12:00 Noon - Hearing Adjourned until 2:00 P.M.

2:00 O'CLOCK P.M. HEARING RE-CONVENED

DR. PETRIE takes the stand and continues Brief No. 73

There is, however, no way in which the operators in the South Minto district (and most of the mines are in this area) can route their coal over this spur to the main C.N.R. line at Hardwood Ridge, although the C.P.R. and C.N.R. tracks are physically joined. (they are together). There is no railway operating organization which can move the cars from the C.P.R. spurs in South Minto to the C.N.R. spur. The operators in South Minto must, therefore, route their coal via C.P.R. to Chipmen, which is on the C.N.R. main line, paying a switching charge of 30 to 35 cents per ton. This method of moving South Minto coal to C.N.R. destinations in the north of the province involves an extra rail haul of some 15 miles. (and on the map which we presented you can see that in order for the South Minto operators to get to Hardwood Ridge they have to go along the C.P.R. main line to Chipman and then back). Such an uneconomic condition could be eliminated if an inter-switching organization were set up in the Minto yard. A move of this kind would in effect provide the South Minto operators with a direct C.N.R. outlet, which would assist them materially in increasing their sales to the C.N.R. itself.

In view of the extra charges of 30 to 65 cents per

ton of coal moved to the Grand Lake Power Plant, a broader revision of the local rate structure is needed. The incorporation of Hardwood Ridge, Chipman and the Grand Lake Power Plant into the Minto yard limits would provide one solution to the problem.

A schedule of switching charges in force in the Minto field is presented in Appendix B. (That is the last page in this submission, page 60. It might be pointed out in connection with a question raised this morning, that Mr. Benton Evans, one of the operators, is here and he might elaborate on that point).

BY COMMISSIONER MORRISON - After you are through.

DR. PETRIE continues brief

It will be noted that provision is made for a charge of not less than \$2.00 per car over and above the rate from the station when switching service is provided on sidings beyond an area of 1,000 feet from the connecting switch. On distances over two miles from the switch another extra charge of 50 cents per mile or fraction of a mile is added. This charge bears heavily on some mines, since most of them are relatively far from the main line, and they are placed at a decided disadvantage in relation, for example, to the mines in Pictou County, Nova Scotia, most of which are over 1,000 feet from the main line. Some of these operators perform their own switching, and it is understood that no charge is made by the Canadian National Railways to and from the Pictou Mines located on the long spurs.

BY COMMISSIONER MORRISON - What do you mean by "It is understood"?

A. We have tried to clarify that point as discussed with your Mr. Matheson, and I think he will indicate what our position was.

Q. Leave him out for the moment.

A. Then I will say I put it in as understood because I was not certain of the facts. We have tried this morning through

telephono communication with the C.N.R. to check that, and it does appear that in the case of one operator, McLeod, he is further than 1,000 feet from the main switch and there is no switching charge made by the C.N.R. to switch his coal up.

Q. Of course if you people do not have the facts, I think the Commission will be in a position to get the facts later.

BY MR. FRAWLEY - Mr. Matheson assures me that that is a fact.

DR. PETRIE continues brief

It is submitted that the unequal freight rate structure and the heavy switching charges in the Minto field represent a burden on the industry so heavy as to hinder the marketing of the coal in competition with Nova Scotia coal. In 1941 the switching charges paid by six leading operators on coal movements in the Minto district amounted to \$41,199, and an additional amount of \$9,385 was paid by these operators on coal moved to the Grand Lake Power Plant. Thus they paid \$50,584 for coal movements within the district. This payment by six operators amounted to 2.5 per cent. of the total costs of the whole industry (\$1,963,519) to produce the 523,344 tons of coal in 1941. Switching charges of these six operators were greater than the total combined payments for insurance, taxes, rent and interest for the whole industry, and were nearly as large as the total bill for power (\$53,094), and royalties (\$57,386).

BY THE CHAIRMAN - When you talk about the six operators, those are the people you represent?

A. Yes sir.

Q. Are there other operators in this district?

A. Yes sir.

Q. Are they included in these costs? Are their costs a part of the \$50,584?

A. No sir. I had the figures only from people who are members of the Association.

Q. What percentage of coal do the operators represent who are not represented by you?

A. Roughly I would say ten per cent.

BY MR. TAYLOR - From five to fifteen per cent.

Q. And when you are talking about the coal production you include those?

A. Yes.

BY MR. FRAWLEY - Would there be an appreciable increase in this amount for switching charges outside of your Association?

A. No, it would not be much because the other people would be such a small portion.

BY MR. TAYLOR - It is mostly truck coal that they produce.

BY MR. FRAWLEY - Perhaps the basic difficulty is the fact that there are some privately owned spurs in there?

A. No, I don't say that is the basic.

Q. You told us in between Hardwood Ridge and Minto there were privately owned spurs?

A. No.

BY MR. TAYLOR - There is nothing in the way of the railway taking those over.

Q. Would they buy them?

A. We have never taken that up. If the owners could get costs they would be very glad. The way the owners look at it, if we can get relief from this switching the cost of the spurs which we own would not be a stumbling block.

DR. PETRIE continues brief

It may be assumed for the purpose of the argument in this submission that, prior to the granting of subventions, Sydney Coal moved by water to points on the St. Lawrence River was unable to penetrate further west than Montreal. In an effort to increase the production of Canadian coal by substituting it for American bituminous coal in Central Canada, the Dominion Government granted subventions of various kinds to enable Nova Scotia coal to reach large consuming points in Central Ontario on the same price basis at which competing American coal would be offered. These subventions were based

upon several different kinds of rail and water movement to destination, and they are all set forth in Order-in-Council P.C. 2789 of November 8, 1939 (rescinded in 1939, and replaced by P.C. 3969, December 5, 1939, which lowered the subventions as a war-time measure).

BY THE CHAIRMAN - "It may be assumed for the purpose of the argument in this submission that, prior to the granting of subventions, Sydney coal moved by water to points on the St. Lawrence River was unable to penetrate further west than Montreal". Is that just an assumption, or is it a fact? I don't think it is a fact, is it?

A. The point is that for practical purposes it didn't.

Q. Oh it did.

A. Not in any considerable quantity.

BY COMMISSIONER McLAURIN - Before 1932?

A. Those started in 1928.

BY MR. TAYLOR - I understand that it didn't penetrate west of Montreal in any substantial quantity.

BY THE CHAIRMAN - There would come in again what a substantial quantity would be.

BY MR. FRAWLEY - Mr. Kelley says it would not be a substantial quantity, but that still does not define the word substantial. But apparently it was the exceptional move that was able to get in.

DR. PETRIE continues brief

The benefits received annually between 1933 and 1943, by the Nova Scotia coal industry, as compared with those received by New Brunswick, are shown in Table 16 (which is on page 55). The Dominion Government has expended on Nova Scotia coal during this period sums ranging from \$1,250,000 to \$2,988,000 annually, totalling \$21,900,000. The tonnage on which subventions were paid ranged from 803,892 tons in 1943 to 2,420,694 tons in 1939. A total of 20,422,112 tons were moved under this assistance in the period 1928 - 1943.

In addition to the above expenditures, three

railways owned by Nova Scotia coal companies have received monetary benefits of some 8 cents per net ton from the Dominion Government under the terms of the Maritime Freight Rates Act, applied to coal movements to seaboard for Water shipment. These are the Cumberland Railway & Coal Company, The Maritime Railway and Coal Company, and the Sydney-Louisburg Railway Company.

Furthermore, direct assistance within the province of Nova Scotia has been given to the coal industry by the Dominion Government in the form of a bonus on coal used by the Dominion Steel and Coal Company to make coke used in the manufacture of steel. The average annual cost of this assistance during the years immediately preceding the war was approximately \$220,000.

A comparison of the subvention expenditures in Nova Scotia and New Brunswick in 1939 shows a marked difference on a per ton basis. The subvention paid per ton of coal moved from Nova Scotia was \$1.23, as against 84 cents in New Brunswick. In terms of total output of the two provinces in that year (7,051,176 tons in N. S., 468,421 tons in N.B.), Nova Scotia received assistance at the rate of 42.3 cents per ton of coal produced, compared with 9.7 cents in New Brunswick.

The coal producers in the Minto-Chipman district of New Brunswick approve whole-heartedly of both the principle involved in assisting the Nova Scotia industry and the extent to which it has been assisted in the past. Unfortunately, however, this type of assistance is not based upon a principle which is applicable to the New Brunswick industry. As already stated, the Minto-Chipman operators are virtually compelled to market their output in the industrial market of New Brunswick. We feel that there is just as good a case for federal assistance to New Brunswick as for Nova Scotia, and moreover, that the assistance in terms of total output should be on a more equitable basis in the two provinces. Comparing again the assistance per ton of output in 1939, 42.3 cents in Nova

Scotia and 9.7 cents in New Brunswick, it appears that a substantially larger sum could and should be appropriated to put the assistance given to the New Brunswick industry on a basis comparable with that in Nova Scotia. It need hardly be pointed out that New Brunswick has contributed its share to the cost of assistance granted by the Dominion Government to all of the other coal producing provinces.

Any effective assistance given to the New Brunswick operators must, however, be based upon a principle different from that applied in the case of Nova Scotia. Nova Scotia must distribute its coal over the whole eastern Canadian market - - Ontario, Quebec and the Maritimes. New Brunswick, on the other hand, must concentrate on the New Brunswick market. It is of the greatest importance, therefore, that New Brunswick coal be allowed to compete in this market. Normally it could, if the cost of rail transportation to the main market centres were comparable with the costs borne by Nova Scotia coal.

In the pre-war period it was necessary, because transportation charges were so high, relative to those on Nova Scotia coal moving into New Brunswick, to accept such a low price f.o.b. mines, that the industry operated at a loss over a long period of years. The volume of sales was curtailed to such an extent, and the actual working time (particularly in the summer months) so restricted, that it was impossible either to pay wages commensurate with the hazards of the industry or to secure a return on the capital invested.

Equalization of the freight rate structure applicable to Nova Scotia and New Brunswick coals moving to New Brunswick distribution centres, and the elimination of switching charges in the Minto-Chipman area would, we feel, help the New Brunswick industry to maintain competitively its optimum output of 500,000 tons per year.

It is not suggested that the freight rate structure be changed. Rather it is requested that freight rate subventions be granted on New Brunswick coal movements within

the province in an amount necessary to equalize the lowest rates per ton mile on Nova Scotia coal moving to this province, and the rates paid on New Brunswick coal moving to the same distribution points.

It is also requested that every mine in the Minto-Chipman field be relieved of all local freight and shunting charges so that coal from each mine can be placed on the C.N.R. main line at Chipman and Hardwood Ridge, on the C.P.R. main line at Minto, Chipman and Coal Creek, and at the Grand Lake Power Plant without any cost of transportation.

BY COMMISSIONER MORRISON - At that point, how far is it from the mines to this Grand Lake Power Plant?

A. If Mr. Taylor could answer that.

BY MR. TAYLOR - The nearest mine is probably within a mile and in the middle of the district there are mines from 3 to 5 miles.

BY MR. FRAWLEY

Q. What do you mean by the middle district?

A. All the middle.

BY COMMISSIONER MORRISON - If we set the minimum at a mile and the maximum at five, it would be correct, would it?

A. In the Minto district, yes.

BY BENTON EVANS - By rail it would be 8 to 10 miles.

BY COMMISSIONER MORRISON to MR. TAYLOR

Q. I want the distance direct?

A. Within five miles.

Q. Is it good roads to the Power Plant?

A. That has been considered too.

Q. It seems to me that perhaps you could give the C.P.R. a little competition without calling on the C.N.R.

BY MR. FRAWLEY - Move it by oil or gasoline.

BY COMMISSIONER MORRISON - Powderized fuel. That would not be unfair. I am talking economics. If the C.P.R. are holding them up on transportation, I would have no objection to having the Imperial Oil compete with the C.P.R. if it will help the coal miners,

BY BENTON EVANS - Coal is already being trucked now from some mines.

BY COMMISSIONER MORRISON - No trouble with that form of transportation.

BY MR. TAYLOR - No, the Power Plant can take trucked coal. Those that are taking truck coal now are those that do not have mine sidings.

BY MR. FRAWLEY - The people who do truck it probably get a better price per ton; they are rid of the switching charge.

A. They get the delivered price which includes that 30 cents.

BY COMMISSIONER MORRISON - The burden of your submission is, as I read it, the extra switching charges and all the other charges which the C.P.R. are guilty of imposing on the industry. I was wondering if the question of trucking the coal in there was under consideration?

A. It has been, but it is mostly slack coal that goes down there, and we are loading slack coal for other customers, and it is very difficult to load in a truck pocket and a railway car at the same time. It adds to the cost.

DR. PETRIE continues brief

The proposal which is made in this submission involves the application of a freight rate subvention on New Brunswick coal moved to points within the province. Assistance of this kind does not appear to involve the Dominion Government in any new or untried policy. It is not a new principle, it is merely different from the existing subvention policy. Precedent has been established by the Maritime Freight Rates Act, under which a portion of the transportation cost of coal and other commodities is borne by the Dominion Government, regardless of whether the movement is entirely within one of the Maritime Provinces, or from the Maritimes to other Provinces.

BY COMMISSIONER McLAURIN - The Maritime Freight Rates Act was the settlement of a grievance. You are not going to revive the Courts now and say here is another grievance.

A. No.

Q. You can't quote that as a principle, can you?

A. Except that we state that this has been done.

Q. To settle the pre-confederation grievances, if they were settled, you cannot take the same course.

A. But we have another grievance and we feel that the same principle could be applied to settle that grievance.

BY THE CHAIRMAN - It does not precede Confederation?

BY COMMISSIONER McLAURIN - The solution you suggest may be a good one but the Maritime Freight Rates is surely not a precedent.

DR. PETRIE continues brief

Again under Order-in-Council P.C. 3971 (Dec. 5, 1939), British Columbia coal producers are granted an allowance of 75 cents per net ton of coal supplied for bunkers of ocean-going ships. There appears to be no provision disallowing this assistance to coal supplied to vessels engaged in coastal trade in British Columbia.

BY MR. FRAWLEY - Going back to the Maritime Freight Rates Act, you get the benefit of that plus this federal bonus to equalize with Nova Scotia. You would not give up what you get by the Maritime Freight Rates Act?

A. Oh no.

BY THE CHAIRMAN - Of course the Doctor is dealing with two different things altogether. He says the industry is not entitled to subventions when the movement is within the province.

A. Correct.

Q. But that Nova Scotia coal gets that benefit and are able to put their coal into near the Minto mines, or some place up here with a subvention.

BY MR. FRAWLEY - Does the competition which you meet from Nova Scotia coal because of the favorable freight rate, that is a rate given to the Nova Scotia coal shippers by the railway companies? The federal subvention does not come in that?

BY THE CHAIRMAN - Oh yes it does.

BY COMMISSIONER McLAURIN - Not as between the provinces except as the Maritime Freight Rates Act comes in.

BY MR. TAYLOR - But the subvention as a subvention does not apply to Nova Scotia shipments into New Brunswick.

BY COMMISSIONER McLAURIN - But the St. John Newspaper said the other day that it did.

BY THE CHAIRMAN - Well you didn't see it in the Fredericton Gleaner. They are the only people that can criticize it just now.

DOCTOR PETRIE continues brief

D. RECOMMENDATIONS

In view of the fact that the Minto coal field is dependent upon the New Brunswick market as an outlet for most of its coal, and since Minto coal must compete in this market with superior coal from Nova Scotia and other places, it is essential to the future of the field that it receive the full benefit of its favorable geographic location in relation to that market. Under the existing freight rate structure it is impossible for the Minto producers to secure the natural advantage which would be theirs. It is therefore recommended that the following policy be implemented by the Dominion Government:

1. The payment by the Dominion Government of all switching charges now levied on the movements of coal in cars from the various mines in the district to the main lines of the Canadian National Railways and the Canadian Pacific Railway and to the New Brunswick Electric Power Commission's Plant at Grand Lake.

2. The payment by the Dominion Government of rail subventions on the movement of all coal from the Minto-Chipman district to points within the province, the amount of the subvention to represent the difference between the lowest rates per ton mile in effect on competing Nova Scotia coals shipped to the principal consuming markets in New Brunswick, and the rates in effect on coals shipped from the Minto-Chipman district to those same consuming points.

3. The payment of an additional subvention by the Dominion Government over and above that named in Clause 2 above, on New Brunswick coal shipped to ports such as St. John, Bathurst, Campbellton and Dalhousie in such amount as may be necessary to meet the competition of foreign waterborne coals.
(The appendix to this brief is at the end of this Volume)

BY COMMISSIONER McLAURIN - There is nothing in the brief by way of facts dealing with No. 3 is there?

A. No sir. In the Statistical Table I think it shows up. I will give you the number of that Table presently, which will show the imports. Table 19 on page 57. It shows the movement of external coal into this market.

BY MR. FRAWLEY - Will you elaborate on that please. You say you would like to have a subvention on coal which you ship to St. John? Not for export, you mean?

A. No sir, for consumption in St. John.

Q. On the movement from Minto to St. John in such amount as may be necessary to meet the competition of foreign waterborne coals. You don't mean the coal coming in from Sydney?

A. No. Foreign.

BY COMMISSIONER MORRISON - While the competition from Sydney is great, you have not yet put them in that class.

BY THE CHAIRMAN - It would not do you much good if it didn't help you to compete with the Sydney coal, much of which is waterborne.

BY MR. FRAWLEY - Well now Dr. Potrie you have a very fine brief here and I am considerably under a disadvantage to intelligently examine you upon it, because I only saw it as you read it. I saw it last night but did not have a chance to read it. There are some things though that I think I will ask you to expand upon. On page 15 near the bottom of the page, you say, dealing with the question of sizing coal, "no significant results have been achieved" Why have there been no results? What do you mean?

A. The totals shown in the Exhibit's Appendix indicate that the sales of these grades have been very small, very low, which I took to mean that people were not interested in buying say egg or other specifically domestic types of coal.

Q. In other words, sizing the Minto coal alone and nothing else does not increase the popular demand?

A. That is what the record would seem to be.

Q. Do you agree with that Mr. Taylor?

BY MR. TAYLOR - Well talking about sizing, I don't know what more preparation you could do. Because if you reduce the ash and sulphur, you must wash, and you can't wash successfully until you crush. Minto coal if it is to stay in the lump size, has to stay in the size it is, and that has not been attractive enough to the domestic consumer to create a market. We have tried to invade that market at different times and have devoted a lot of time and energy to it.

Q. The mere fact that you bring it down to size, off, stove and nut, does not seem to sell it. They would not take the coal even if you did put it in sizes that ordinarily do capture a domestic market?

A. We have never been successful in getting consumers to buy it in any appreciable quantities.

Q. Can you tell us what has kept the buyers away?

A. There are not so many buyers that use coal. You take in the City of Fredericton, a great many of the houses were built long ago and have a small fuel area which is very satisfactory for burning hardwood or hard coal, but when you get bituminous coal they have a great deal of soot and inconvenience and do not like it. The most progress we have made in the domestic market, and I refer to household use, there has been quite a tendency in the last five or six years in some of the buildings and larger homes to put in mechanical stokers, and any increase that we have, that seems to be about the only point we can meet competition with the anthracite and American coal. In some cases we are doing it there, and that seems to be about the only field we have been able to develop in increasing the domestic market.

Q. Those would be mostly large installations, and in the larger cities?

A. Yes, perhaps apartment buildings, or government buildings or quite large homes.

Q. Apartment buildings and institutions?

A. We hope and we believe that the trend should be that way. We are going to try putting on a campaign by education and advertising so that we can get our coal in practically all the institutions in New Brunswick. We know that equipment can be developed for institutions and things of that nature, schools. We have not touched the school market in the Province of New Brunswick. Some of us have tried in the city of St. John different times. It is largely because the buyers have not seen fit to make the capital expenditure to build the equipment to burn our coal.

Q. Do you think the equipment alone is all that is needed? Do you think this equipment you speak of can handle the coal without any treating being done to the coal, or washing?

A. That brings up another question of economics altogether. We know in this day and age that practically anything can be done with coal from a technical standpoint. But you come to the point as to whether it is sound business to do it or not. And in marketing coal for a great many years different companies have gone into it from every angle, and into the question of marketing, and the development according to the graphs, in 1932 our markets started to increase in New Brunswick. The reason the market increased largely in that year was that we were able to sell our small sizes to the paper mills, the reason being that about that time coincident with the building of the power plant in Minto pulverized fuel was put in, I think first by the Nashwaak Paper Company about 1927, or thereabouts, and they got very satisfactory results, and as a result of the experience of the Nashwaak people and some others, it was decided to build this power plant at Minto with the idea that our coal could be used and give efficient service under the pulverized system of burning. That was further extended to the International Paper Company mill at Dalhousie and they put in pulverizing equipment, and since that the Bathurst Company has done the same, and I think the Fraser Companies at Edmundston are considering it. Going into the economics of it at that

time, I am in a peculiar position because I am connected with the buyers too, but after making a complete study of it we decided it was far better to put in the equipment to burn the coal as it is, than to spend a lot of money on a cleaning plant which would necessarily waste, as in taking out the ash you are going to lose a quantity of coke.

Q. Would you like to leave the impression with the Commission that the future of this field is for use in pulverized units, and the domestic market is not worth while bothering a great deal about?

A. I think so, but we may be wrong, but our brief is built up on this basis of our 1939 market. First we have to have the railway business to take care of our coal. There is nothing we can do about lump coal in the way of washing to improve the quality.

Q. You say that definitely?

A. I believe it is agreed upon by technicians, and when we have the railway market for the small size, and that market has grown by leaps and bounds, from 22,000 tons in 1932, to about 80,000 tons this year.

Q. You spoke about the plant in Minto?

A. The New Brunswick Electric Power Commission, government owned.

Q. That may be so. You say the objective then of the producers in that field should be this power unit?

A. That is what we believe, and coupled with that the other industrial users in the province, the pulp and paper companies which are the largest users of coal.

Q. And can use it without any beneficiation?

BY MR. STREETER - Yes. And at the present time we are getting into Bathurst and Dalhousie, but owing to this freight rate set-up we are not selling in St. John for industrial use. We are not selling to the pulp mill in St. John at all, and we feel that we are entitled to that. We are put in a competitive position in our own province.

Q. Why are you not selling any coal to the power plant you say in St. John?

A. There are three large users of coal in St. John, the Atlantic Sugar Refineries, the Port Royal Pulp & Paper Company, and the New Brunswick Power. You have pulverized installation in the Port Royal Pulp & Paper Co. and the New Brunswick Power, and the Atlantic Sugar Refineries are going to put in a pulverized unit as soon after the war as they can. I have been told by their Manager that they are going to do that.

BY MR. FRAWLEY - Are those the people that you say you cannot sell as against Nova Scotia coal?

BY MR. TAYLOR - Yes.

Q. Tell us again why you cannot sell those three large consumers about 20 miles away?

A. No, 60 miles away.

Q. Why is that ?

A. It is because quality considered, they consider our prices are not competitive.

Q. Even though they have these pulverized units, you cannot convince them that your coal is as good as Nova Scotia coal?

A. No.

Q. What about the freight rate?

A. It does not come in there.

Q. Tell us about that?

A. The freight rate from Maccan district in Nova Scotia is 85¢ per net ton.

Q. Maccan to St. John?

A. To Fairville.

Q. What do you say it is Mr. Streeter?

BY MR. STREETER - 155 miles with a rate of 85¢ per net ton on slack coal. And the rate from Minto to St. John is 95¢, a distance of 101 miles.

Q. Minto to Fairville?

A. Yes.

Q. How many miles?

A. 101 by rail.

Q. And the rate?

A. 95¢ per net ton on slack coal.

BY MR. TAYLOR - Their's includes the toll charge on the bridge at St. John.

BY MR. FRAWLEY - You don't know how they evaluate those two things?

A. I don't say that all these 3 consumers buy that coal; but that grade of coal has been a serious competitor in times past and has not allowed us in that market.

Q. And that rate of 85¢ you are not here to say is too low, but it is what you have to get some relief against?

A. To Minto it is below cost of service.

Q. You say it is below cost of service?

A. Anybody will admit that.

BY COMMISSIONER McLAURIN - Are those rates greatly out of line?

BY MR. FRAWLEY - 101 miles 95¢ and 151, 85¢.

BY MR. TAYLOR - And in addition to that there is the bridge toll charge, the bridge over St. John Harbor is owned by another Company, and it is taken in that 85¢.

Q. Do you have to pay that on top of your 95¢?

A. No, or they don't have to pay it.

BY BENTON EVANS - They have to cross the bridge on the 85¢, and we don't have to cross it on the 95¢ rate.

BY MR. FRAWLEY - That is a rate that has been filed and approved by the Board of Transport Commissioners, the 85¢?

A. Yes.

BY COMMISSIONER McLAURIN - Why do you suggest as a remedy to those rates, and without knowing more than I do about it, it impresses me as being out of line, why do you say the remedy is Dominion Government subvention?

BY MR. STREETER - I think in that connection as far as I can delve into this transportation matter, it still seems to me that the Transport Commissioners are not interested necessarily in comparison of rates, one road against another road.. The rate from Springhill, or from Maclean district is 90¢ instead of 85¢. That is of course on the C.N.R. Our rate from Minto

to St. John is C.P.R. I don't believe we would get to first base with any submission before the Board of Transport Commissioners. We are not trying in any way I don't think to state that these rates from Nova Scotia are this, that or the other, but simply to point out that this is what we are up against.

MR. BENTON EVANS - I think one of the Commissioners asked the question as to why we did not appeal to the Board of Transport Commissioners. This brief of which we have spoken previously was prepared in 1938 for presentation to a Committee of the Cabinet, but it was 1939 before we were given an opportunity to present it, and then it was taken under consideration by the Committee, and it was some little time after that before we knew what that decision was, and unfortunately it was unfavorable to us.

BY COMMISSIONER MORRISON - It was under the Chairmanship of Mr. Crearer?

A. Yes. We were then trying to think of some means by which we could make another move, and before we got around to it the war started and the whole situation changed, and those rates did not interest us so much. We were then trying to meet the demand rather than get the market we had not before. And in regard to all these rates, we were told them that our chances before the Board of Railway Transport were not very good.

Q. Who told you that story? Surely the Board of Transport Commissioners, their decisions are not being pre-judged before the case is heard?

A. Well as to the merits of our case. A lawyer might tell you you had a good or a poor case.

Q. At that point again, I am interested to know who told you that?

A. That was some years ago and I cannot say. We got that impression at least.

Q. Having got the impression so firmly..

A. I would like to give the reason Mr. Morrison. I would like to give you the reason why we thought we had no case, we ourselves, and that is that those rates - back in the old I. C.R. days some very low rates were established and Nova Scotia was a coal producing province. New Brunswick was not. We came in later on the C.P.R. and the C.P. led us to believe the rates were the cost of handling the traffic.

Q. Plus.

A. Well all right. In those days the C.N.R. had an annual deficit, and as we saw it the low rates contributed to that deficit, and indirectly the people of Canada were subsidizing the Nova Scotia coal by the low rates. That is the way they were getting a subsidy which we were not enjoying from the C.P.R. And we were going to take further steps and then the war came along and changed the picture entirely.

Q. You have told us a lot of defects and drawbacks of the mining in the Minto field. Would you place on the record now some of the compensating features such as other mines have, such as gas conditions, water pumping, and the general outline of some compensating features of operating mines that acts as a drawback to the many things you have emphasized so excellently this morning?

W.

-1367- (continued from 1363)

BENTON EVANS: Well, Mr. Morrison, I don't know anything about coal mining outside of New Brunswick; I can't make any comparison very well, but I can say something about our conditions here. I can say this. I think the fact that our coal seam is near the surface and that we don't have to go down thousands of feet, in comparison with past years 25 to 50 feet and now perhaps we are down around 100 feet, that is a compensating factor there without a doubt. Then in most cases the mines have had natural drainage, gravity drainage; haven't had to pump a large volume of water. Unfortunately that condition is changing; we are getting into greater depths and some of us I know now are pumping from 25 to 35 or 40 tons of water for every ton of coal that is produced. In some cases that may be just temporary.

MR. TAYLOR: 72, as high as 72.

MR. EVANS: 72 tons of water to a ton of coal.

BY COMMISSIONER MORRISON: There must have been a lot of absenteeism that day.

MR. EVANS: And now we are pumping against higher heads, of course. The heads we had to pump against before were 25 or 50 feet. I am pumping now against a gravity head of 90 or 100 feet. We hope as we go forward that we will have natural drainage in a large area. Some of the advantages we have, we have no gas; we use open lights entirely, which is of course a distinct advantage; and we have been able, instead of having long underground haulage seams we have been able to sink shafts at convenient distances apart. I don't know what the longest haulage has been; the longest we had was about three-quarters of a mile. I think the Minto Coal Company--Mr. King could say. But where a seam more or less follows the surface we could haul the coal underground for three-quarters of a mile or a mile, then sink another shaft.

BY COMMISSIONER MORRISON: How is your roof condition?

A The roof condition in some places has been good, some places bad. It is variable and it varies even within one shaft.

There has been a mine roof in Minto where they roofed it over, legging I think it is called.

Q Of course with your light cover it wouldn't take much weight?

A No, your weight is not serious but of course now we are getting deeper the weight is more serious and larger pillars have to be left.

Q I saw some place in the brief you were leaving 15 foot pillars?

A That was between rooms. He would go ahead for say 200 feet and then he would draw that pillar.

Q In one operation?

A Well, that would be over weeks or months.

Q You would go up the room and down with the pillar?

A That's right.

Q Now your cover is getting heavier don't you find that a 10-foot pillar is not very sound mining engineering on a roadway?

A Well, we got by all right, but it is more serious now, we are getting into more difficult conditions. Of course there are other disadvantages. Our timber costs; it costs as much for timber to take out a 20-inch seam as it would if it were a 4-foot seam; that is, roof conditions being equal. Of course I am speaking more or less of hand pick mining and room and pillar.

Q Now on your longwall operation is it on advancing or retreating?

A Both systems have been tried.

Q Which do you find the most successful?

A I have had very little experience in longwall. Mr. King of Minto Coal Company has had perhaps more experience than anybody in the field. We did operate a longwall for a year or so, not very successfully. Our conditions weren't such as were suited for that.

Q Were you advancing or retreating?

A We did both.

Q And both were not ---?

A Neither one was successful, the reason being, I would say, that our seam right there was smaller than it is at the present time. We had to cut with the machine under the seam in what we call the bottom seam. It was a seam of very low grade coal, with a great deal of sulphur, sulphur balls, iron pyrites. That was very hard cutting. We used hundreds of picks. We stopped about every half-hour to change picks. We couldn't do it. That was the great trouble there.

Q What would you say regarding labor relations in the Minto field?

A As far as I am concerned myself our labor relations are satisfactory.

Q Have you a contract with District 26 of the United Mine Workers?

A Well, we have a Union, the Rothwell Mine Workers Union, in our mine. It is the Rothwell Mine and it is the Rothwell Mine Workers Union.

Q In other words, the Rothwell Company operates the Union as well as the mine, is that what the term implies?

A Oh no, we have nothing to do with operating the Union, as I have found out on different occasions.

Q How many men are in this Rothwell Mine Workers Union?

A Well, the closed shop arrangement, closed shop agreement, all employees that are eligible to belong to a Union belong to the Rothwell Union.

Q And how many are they?

A At the present time we employ around 125 or 130.

Q You agree with the closed shop principle, I take it?

A We recognize the Union and we gave them the closed shop agreement.

Q You wouldn't say it was undemocratic to recognize the closed shop principle?

A Well, there are more democratic ways.

Q The coal mining industry, with perhaps some few exceptions, don't recognize that though, do they? On the North American continent? I am taking in a lot of territory.

A I don't know about the North American continent; I just know a little circle down there.

Q Coming back to your own organization, I must say I am very pleased to see the operators appear as an association. I am a believer in organization. There are six companies mentioned in this Association.

BY COMMISSIONER McLAURIN: Seven.

BY COMMISSIONER MORRISON: How long since it was formed?

A Well, it was reorganized very recently.

Q And have the six companies named in this document the same arrangement with the Weaver Coal?

A Some have and some have not. I can't say offhand who has an arrangement. I know I have myself an arrangement with Weaver Coal Company as sales agent for the railways and the Power Commission, which are our big purchasers.

Q I am not finding fault with it at all. What administrative staff do you have in the Rothwell Coal Company?

A Well, I myself and an accountant who is also assistant manager, and paymaster, and three girls who do the stenographic work and general office work, payrolls, and make out Government reports. We used to get along without them.

Q Well, if you get subsidies you have got to send in reports, you know.

A We know that.

Q And is that a typical example of those other companies named in this document?

A I might go on further of course and say we have at the mine an underground foreman, surface foreman, and another man in charge of our machinery. That is the whole staff. I don't have any superintendent; everything has to be done by myself. Naturally it would be done, I think perhaps, under a superintendent.

Q I was just wondering in a field of this kind, say the technical engineering staff, could a saving be effected by your Association having one good technical engineer to do

the engineering for the entire field?

A Of course as far as surveying goes we keep up-to-date plans of our mine. We have an engineer there who does that work for us on a part-time basis as he is needed.

Q You couldn't keep him going all the time?

A Oh no. He does for us and other operators, and that works out satisfactorily.

Q And that could be carried a step further perhaps with an engineer for the whole field? This surveyor merely surveys what he finds? Does he lay out your mine plans for you?

A Well, if he was asked I suppose he could assist. He has had a good deal of experience down there.

Q But on the whole the operators cooperate very freely for the betterment of the industry?

A They are; I think those of us in our Association.

Q And the relationship with the men in the mines is good?

A I am speaking for myself.

Q And if they were otherwise you would hear it through your Association, your neighbors and competitors?

A Well, we hear something sometimes. I am not expressing any opinion as far as labor relations go.

BY MR. FRAWLEY: Dr. Petrie, on page 22 of your brief you say the industry lost \$65,000 in six years, 1933-1939. How was that figure arrived at? What figures are you taking?

A Taking the figures as provided by the Fuel Board of profits and losses and arriving at the net losses over the period.

Q The profits and the losses as reported to Mr. Neate?

A That is correct.

BY COMMISSIONER MORRISON: And that would have taken into account depreciation and depletion?

A Oh, yes sir, they were charged to cost.

BY THE CHAIRMAN: I think he was asked the question this morning if there was any further investigation of the cost sheets by Mr. Neate.

BY MR. FRAWLEY: Do you know from what your people have told you whether or not thesesheets showing profit and loss were subject to any further examination by Mr. Neate's staff?

A I don't know.

Q Do you know, Mr. Taylor?

MR. TAYLOR: Well, the procedure is, we put in preliminary figures and then before they are accepted as being finalized all our statements of every kind have to be audited by an independent auditor.

Q Of your own choice? Ottawa doesn't send one?

A No, but ---

Q Some reputable auditor?

A Some reputable, practising chartered accountant who would be satisfactory to them.

Q And then that goes to Ottawa and then after that the figures are published, from which you took the \$65,875?

DR. PETRIE: Yes sir.

Q I want to ask you once more, I want to read this sentence to you on page 27: "This tonnage loss can be regained and the additional part of the market served only by a resumption of the price differential between New Brunswick and Nova Scotia coals which existed prior to the war. This price differential can be maintained only if the pre-war wage differential is maintained, along with equalization of freight charges, a matter which will be discussed presently." Now would you just tell me what that means, apart from freight charges; they are pretty fully discussed. What do you mean when you say, if the pre-war wage differential is maintained?

A It doesn't necessarily mean that we refer to pre-war wage conditions, but I feel from my analysis of the economic problem that there must be a differential between the level of wages paid in this industry and those paid in the Nova Scotia industry. That is precisely what I mean.

Q Why do you say that?

A Because primarily of your output per man day, which is lower here than it is in Nova Scotia.

Q Isn't that low because you are suffering a shortage of manpower now?

A It has been lower consistently.

Q Always been lower?

A I wouldn't say always, but in the past seven or eight years for which I have data as published by the Dominion Bureau of Statistics it shows that the output is lower here than in Nova Scotia.

Q There must be some basic conditions that cause that. What are they?

A I would say in the first place the nature of the mining operation, which does not lend itself as readily here to mechanisation, accounts in part at least for the lower output per man day.

Q You have the advantage of some stripping, which surely should counteract the more difficult underground mining?

A It does, but as we say, stripping was not important before the war.

Q It is on the increase now?

A I don't know if it can be maintained at a high level in view of the fact that a good deal of the best stripping coal is being depleted and we are getting into the difficult operation of moving more and more overburden. I don't know the technical end of that.

MR. STREETER: If you will vision a seam 20 inches, which to be mined at all you have to take anywhere from a foot to two feet of mud or clay above the coal down, much of which has to be brought to the surface, if you will vision that condition against a condition where everything is coal that is mined, then you can understand why our costs would be higher, must be higher, if we must pay the same wages that are paid in the mines where the seams are thicker.

Q Don't you think that the miners who have to work under those conditions are entitled to as much per hour or per ton as the miners in Cape Breton?

A I would rather put it this way, that we are dealing only with the economics of it; we must deal with economics. If we can't produce the coal and sell it at a price to compete --

Q Then you must either stop producing or get some Government aid?

A Right.

BY COMMISSIONER McLAURIN: Or: employ people who wish to work for that.

BY FRANK GUSS: You refer to the differential existing between Nova Scotia and New Brunswick. I would like to ask him if there is any differential existing at the present time in the data rate between the Nova Scotia and New Brunswick employees?

A Well, I think that the answer to that is that in some classes there may be, yes.

Q As far as my knowledge, the miners are paid 48 to 60 cents a day less in New Brunswick than they are paid in Nova Scotia right at the present time.

B COMMISSIONER MORRISON: Were you aware of that, Doctor?

A I knew that in some classes there was a differential but I have no figures, have not been able to get them, which show the exact wage structure as it now exists.

Q So evidently this analysis you made and this definite conclusion you came to regarding the need of a differential in wage rate, you didn't make a very exhaustive study, Doctor?

A I think, sir, that I made an analysis sufficiently exhaustive to indicate that you can't pay, in my opinion, the same wages here that are paid in Nova Scotia in view of the lower output per man day here. That is what I am getting at.

Q You are suggesting to this Commission that there should be a differential?

A Yes sir.

Q Now have you concluded what that differential should be?

A I do not know that.

Q And you weren't fully aware that there was a differential at the moment?

A I was aware of the fact that there is a differential in some classes, but I don't know what it is.

Q And you don't accept the statement made by Mr. Guss that there is a differential in all classes?

A I have not seen anything to convince me of that, any published figures, and I am working purely on the figures supplied by the Dominion Bureau of Statistics. That is my source which I have cited throughout this brief.

MR. GUSS: Well, I am prepared to bring in the figures tomorrow morning.

B. MR. FRAWLEY: When you say that there must be price differential you are not leaving out of consideration what you have emphasized so much, there is a differential in quality?

A No.

Q That is also to be kept in mind?

A Yes sir.

Q I am still bothered as to how you are going to take care of this, what you say must be a differential in wages. If you must keep up those wages, and there are other considerations which would indicate that you should, then the Government will have to make up the difference? The existing wage structure and the existing price structure in combination with their cost structure is such now that the industry is operating at a loss. The United Mine Workers of America made an application not long ago for a further increase in wages and two weeks vacation with pay and that application was rejected. Now if they had been successful in that application your picture would have been just that much worse?

A Yes, with prices frozen it would of course mean a still greater deficit.

Q Do you think that your people could have gone on operating?

A I doubt it very much. I don't know how they could on an economic basis.

BY THE CHAIRMAN: Well, the Government would pass the price over to the public, myself and others, to make up the difference as they did when they raised the price of coal \$1.

MR. TAYLOR: There is just one possibility of something that might occur in the future. Through our brief we have brought out that all of us have tried mechanization. We didn't have much success but gained a lot of experience and I think that a good many of us, as soon as times get normal and materials available, will go over that whole proposition again and see if there isn't something we can work out by way of mechanization to improve our output per man day. Then all this question of differential in wages between Minto and Sydney would disappear. As long as it does exist it is an economic factor and we have got to look at it. We have either got to shut down or someone has got to pay the difference or the men have got to take less, but we don't want to go back to that. We said in our brief that we in our own opinion think that our wages are too low. We want to maintain wages if there is any way to do it.

BY MR. FRAWLEY: Doctor, you have concluded your brief with these three recommendations, but it does strike me as amazing that you should expect the Federal Government to look after these switching charges unless you can demonstrate you have been to the railways to secure your demands and they have completely rejected reasonable demands. Do you think that your dealings with the railway companies have been sufficiently complete that you should take the alternative of seeking Federal assistance for something which strikes me, with my limited knowledge of it, something that the railway companies should iron out.

A I am not qualified to say how far the Coal Operators have gone, not being present at their meetings.

Q If the Greenwood Coal Company over in Pictou County are getting their yard switching at no cost it seems to me that that should be brought very forcibly to the attention of the railway company, and has it been, do you know?

A I don't know.

Q Do you know, Mr. Taylor?

MR. TAYLOR: I know we made representations in years gone by, but not within the last five or ten years.

Q Not within the last five or ten years?

A Not since 1938.

Q Don't you think you should?

A We made representations year after year.

BY THE CHAIRMAN: Well, the war interfered, you see.

A We protested vigorously when these switching rates were put into effect first.

BY THE CHAIRMAN: Mr. Frawley, you, I thought, perhaps didn't pursue that question of rates to Saint John--there were other places mentioned such as Bathurst, the Fraser Company in Bathurst and other places where you had difficulty to get your coal in.

BY MR. FRAWLEY: That is the last one of his recommendations.

MR. TAYLOR: The point is that under the old New Brunswick Central Railway operation, before it was taken over by the Canadian Pacific, the old New Brunswick Central laid the mine sidings to the mines and did the shunting, and it was all incorporated in their tariff, then after the C.P.R. took over they first instituted this \$2 switching charge, and we protested by every means at our disposal at that time against it, something like 20 years ago now, and we didn't get any place.

Q I am struck by the fact that there are in there lying between Minto and Hardwood Ridge--how many miles?

A That siding owned by the C.N.R., six miles.

Q How many miles of privately owned?

A A little over two miles.

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Q And how many miles of Canadian Pacific?

A About three-quarters of a mile.

Q How did those private sidings come to get in there?

A We built them.

Q The companies built them?

A Yes.

Q That was at the time the Canadian National Railways had not built anything out there from Hardwood Ridge?

A Yes.

Q First came the Canadian Pacific, and you tacked your sidings on to the end of the line?

A Yes, and the Minto Coal Company came out to the end of our sidings.

Q And then the C.N.R. built on the end of that?

A Yes.

Q That means on that little few miles of track the C.P.R., the Minto, your siding and the C.N.R.?

A Yes.

Q Are relations with the Minto Coal Company satisfactory?

A Yes.

Q If the Canadian National wanted to bring coal down there you would charge them something?

A We never have.

Q Does the Minto Coal Company charge them anything?

A We never have.

Q I think I will ask the railway companies for an explanation of that.

BY THE CHAIRMAN: You might ask them for an explanation of the John W. MacLeod position. I think there is a very good explanation of that; I mean the railways have a good explanation for it.

BY MR. FRAWLEY: Now your second recommendation is that the Dominion Government should extend the principle of rail subventions to intra-provincial movements?

A That's right.

Q That is getting it down to an irreducible minimum, isn't it?

A Yes sir.

BY COMMISSIONER McLAURIN: No, you could go from county to county.

MR. TAYLOR: We believe in effect that the lowering in cost of freight rates from points of origin in Nova Scotia to points of consumption in New Brunswick is in effect a subvention, although under the interpretation of the Act is is not a subvention but we believe it has that effect. We do not sell coal in Nova Scotia. We are asking that we have the same subvention in effect within the province as Nova Scotia has from Nova Scotia into New Brunswick.

BY MR. FRAWLEY: I follow you. I don't know whether your premises are altogether sound, perhaps. I call to the attention of the Commissioners there is a statement of the Board of Railway Commissioners in the case of the Ontario Department of Highways vs. the Michigan Central Railway, 14 B.R.C. 323: "The rate charged on one railway is not necessarily a measure of the rate to be charged on another railway. What weight should be given to such a comparison depends on the facts involved."

A We are not asking for freights; we are asking for a subvention.

Q And here is a pronouncement by the Board of Railway Commissioners, reported in 20 C.R.C. at page 155, Western Retail Lumbermen's Association vs. Canadian Pacific, Canadian National and Grand Trunk Railway Companies: "It is not part of the obligation of a railway company under the Railway Act to equalize costs of production through lowered rates so that all may compete on an even keel."

BY COMMISSIONER McLAURIN: That is the position Mr. Taylor is taking. He says, "We have kept away from the Board of Transport Commissioners because we can't get relief there and we are asking for a provincial subvention."

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BY MR. FRAWLEY: I don't think there is anything else he can do, except the person to whom he goes for that subvention on the intra-provincial movement, perhaps you should be approaching the Legislature of New Brunswick and not the Parliament of Canada. And so you say now that the rail subvention should extend to the movement of your coal to points within the province to equalize what you say, what is regarded anyway, as an unfair rate which the Canadian National has given --I am not imputing any sinister meaning into the word "unfair"--but it has had the purpose of clearly establishing a differential between your coal and Nova Scotia coal, so that you can successfully charge less for it than Nova Scotia coal?

A That's right.

Q You start out by charging less for it but that is overcome by the freight rate on Springhill coal?

A And other competing coals in Nova Scotia.

BY THE CHAIRMAN: What are the places that you are unable to compete, where you should have a market in the province, besides Saint John, on account of those freight rates?

MR. TAYLOR: This is not necessarily a condition as of today.

This is a condition that we expect to face as soon as things become normal. For instance, as of today competition just is not there; we can sell our output today; but this is really what we believe we have to face in the post-war period.

Q That is what we are here for. Well, previous to the war you had the same freight rate structure and were you able to get as far as Bathurst on a fair competitive basis with Nova Scotia coal?

A No, we thought that in 1939--that is what we are using for our year--that we had got into Bathurst, Dalhousie and Edmundston, but we say in our brief that we were paying wages too low. We realize that if we are to stay in business we

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I am very glad to hear from you and hope you are well.

You should be very happy and contented with the present.

It is very good to hear from you and hope you are well.

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have got to pay a fairly decent wage, and all those benefits that we can get in this way will enable us to put more in our wage structure.

BY COMMISSIONER McLAURIN: I don't put this to you unsympathetically, Mr. Taylor, but it is a pretty drastic sort of remedy, isn't it, this inviting the Federal Government to do one further thing by way of subventions than it has ever done before. Putting yourself in the position of the Federal Government, regardless of the political complexion it might represent, it would be the sort of thing that ^{you} would want to pause and sleep on before you did?

A We realize that but we believe that our case is fair because we are in this unique position that we feel that our market is within our province. We believe that the policy of the National Fuel Board, or whatever that body is, in subventions is all right, as part of the Canadian national fuel policy, but when the Nova Scotia industry gets a benefit of that that gives an increased production in Nova Scotia, there is no question about that. The two factors in lowering costs in the coal industry are your output, your production; the higher your production the lower your costs; the higher your output per man-day the lower your costs. Through this benefit being given to Nova Scotia it is helping to put them in a preferred position both in regard to man-day output and production.

BY COMMISSIONER McLAURIN: There may be other conditions that make your prospects more favorable than they today appear. Projecting yourself into the future you are expressing the view that this industry is faced with the remedy you suggest or probably succumbing?

A Yes, there has got to be something done. The industry came along from nothing. The operators have been criticized that we have done this and done that; why don't we try this and that. I think we have tried to be sincere, we have tried to explore all the avenues in the industry, like what could be

done in the way of by-products, improving the market, and we did bring along those industries, the present operators in the Association, from practically nothing to 500,000 tons a year, and we did that without any direct Government assistance except a small amount of about \$16,000 a year for subventions over a 10-year period, which was neither here nor there to the industry as a whole.

BY COMMISSIONER MORRISON: The only assistance you received was the contribution from the workmen by working for wages that were below par?

A I won't dispute that. We may have been too low. Certainly we weren't too high, we know that.

BY MR. FRAWLEY: Tell me, the Atlantic Sugar and Port Royal and the New Brunswick Power Company are pretty good accounts, aren't they?

A Yes, they would be if anybody could get them.

Q Dosco has them now?

A I don't think Dosco has them all.

Q Suppose you did convince the Canadian National that they were giving a less than service rate and they increased that rate?

A They won't do it.

Q I am suggesting to you that you may have other obstacles to overcome. Suppose the railway companies put in a rate which would be comparable mile for mile and ton for ton with the rate you now have to pay to get into Saint John, don't you think that there is a danger that the people who are supplying that coal may do something about their price?

A Well, I don't think they can sell below cost of production. Surely the Government is going to have some method of supervision. This is my personal opinion, I am not presenting it as president of the Association, but I think that any Government is entitled to at least some information on an industry. If we are asking for this money to assist us on the movement of coal they have the right to say whether it

will be granted or not, or whether the assistance is economical.

Q Before they assist, you think they would have something to say about the price that the Nova Scotia operator would quote to keep the business you say should be your business?

A Yes.

Q I think perhaps you are right; they are probably working far too close to the margin there to give the prices. Perhaps your answer is the right one.

BY THE CHAIRMAN: You are not expressing that opinion as the opinion of the organization?

A No.

Q I think it is a very sound opinion. If persons are going to supply money to help an industry they should have some little say in it.

MR. STREETER: It seems to me I don't think that we want to say that that is our market, that we should supply those three companies; I don't think that is what we intend to say. It is simply that we feel that we should have the same rights per ton mile so that we ---

BY COMMISSIONER MORRISON: So that you can have a square shake of the dice?

A Yes.

BY MR. FRAWLEY: If you got it then it would be up to you to see if you could get the business?

MR. STREETER: Exactly.

BY MR. FRAWLEY: Now there is another interesting observation at the bottom of page 36: "Comparing again the assistance per ton of output in 1939, 42.3 cents in Nova Scotia and 9.7 cents in New Brunswick, it appears that a substantially larger sum could and should be appropriated to put the assistance given to the New Brunswick industry on a basis comparable with that in Nova Scotia." Now there was a big difference there. Why was that?

DR. PETRIE: Such a much larger movement of coal from Nova Scotia

was involved.

Q Yes, the movement was large so the gross would be larger, but the per ton assistance was 42.3 cents in Nova Scotia and 9.7 in New Brunswick.

MR. TAYLOR: The point is they were shipping outside the province of Nova Scotia. We are not objecting to their market because their market is outside the province of Nova Scotia. Our market, we believe, is in the province of New Brunswick. But the very fact that the industry in Nova Scotia gets this assistance puts them in a much better market position in the province of New Brunswick when you take the over-all picture, and we feel that if it is going to be a matter of Government policy to assist the coal industry that we are entitled to an equal break with the industry in Nova Scotia.

BY MR. FRAWLEY: You have an equal break to this extent, haven't you, that if you could get into that Montreal market the same subvention would be offered you?

A We don't think that is sound economics.

Q You wouldn't care to express any opinion as to whether it is sound for Cape Breton coal to be moving that far under Government aid?

A That is a matter that this Commission has to answer. That is part of the Canadian national fuel policy and I think our Association is whole-heartedly back of a national Canadian fuel policy, to use as much Canadian coal as we can in Canada.

Q The Commission has not been told that there is any such national fuel policy.

A Well, there was supposed to be a policy in the '30's.

Q I think everything is open to this Commission.

BY COMMISSIONER MORRISON: When did you say that policy was?

MR. TAYLOR: Well, if it was not a policy it was to formulate a policy.

Q You are not referring to the election promise of 1930, Plank No. 4?

A I can't remember that far back.

BY MR. FRAWLEY: You say you want an additional subvention over and above the subvention we have just been talking about on New Brunswick coal shipped to places like Saint John, Dalhousie and Bathurst. Why do you want that extra subvention?

DR. PETRIE: Merely, to once again reiterate, to give us a chance to compete in our own market. Nova Scotia is the most important competing coal in this market. There has been in the past movement of coal from other places in here and we feel that it is consistent with the request made in clause 2 to have a further clause including other coals, because we don't know what sort of competition there may be in the post-war period. It is possible, isn't it, that Russia may want very much to lay down her cheap coal here?

BY COMMISSIONER McLAURIN: We may want to take it too. We have been giving them quite a bit.

MR. TAYLOR: We may, but what we feel is that if we want this industry to survive we want some sort of assistance.

BY COMMISSIONER McLAURIN: If we want Canada to survive we had better start trading with somebody.

DR. PETRIE: Furthermore in the past shipments of coal from England have come in here in ballast shipments.

BY MR. FRAWLEY: I want to talk about that for a minute. You say that coal from British mines came in in ballast. You don't think that should be discontinued?

A I am not in favor of discontinuing the movement of that coal.

Q Let it come in, but give us aid so that we can --

BY COMMISSIONER McLAURIN: All things being equal, compete.

A That's right.

MR. TAYLOR: What we are trying to do, the only industry we have in the province as an exporting industry is the pulp and paper industry. That is our largest market. We can't go before your board and the people of the Dominion of Canada asking for something that will place an imposition on one of our leading exporting industries. They have got to be in a position to buy their fuel in the open market. If

Nova Scotia coal is their best coal we can't ask that industry to buy our coal at a higher price, therefore we are asking for this assistance in the way of freight so that we will be in a position to get to certain points, and we have tried to build up the thought we have a limited market and we would like to hold it. We are not asking for zoning because the quality of our coal is not sufficiently good.

BY COMMISSIONER McLAURIN: I think we understand your position.

I would like to reflect on it. Whether a person agrees with it or not ----

BY MR. FRAWLEY: I think the pulp and paper industry are coming before the Commission. They have to sell their pulp and paper in a world market and they would like to be able to buy their fuel free of any restrictions or artificial conditions of any kind. Now if the pulp and paper company wanted to buy some coal that was brought in from Belgium at Dalhousie or Bathurst shouldn't they be allowed to do it?

MR. TAYLOR: That is a pretty difficult thing for me to say but we naturally know that the pulp and paper business is an export business and an export business depends on their exports, unless they are Government-assisted.

BY MR. WADE: I would like to ask Dr. Petrie one question. On page 5, the first paragraph there, am I correct in thinking that the suggestion in that paragraph is that public assistance to the industry is justified on the ground that the coal is needed for national defence purposes?

DR. PETRIE: I beg your pardon. Would you repeat that?

Q Am I justified in thinking that that first paragraph is suggesting that public assistance to the industry is justified on the grounds that coal is needed for national defence purposes?

A Yes. Put it this way: Without coal your armament program would not exist, and if you haven't the industry in your nation on an operating basis and get into another national emergency such as we have been in for the past five years

and therefore are dependent on external and uncertain markets, your national economy to be geared for war is in a very precarious position if, for instance, blockade were effected, and it was in part as everybody knows, and we couldn't get coal moved from Britain or the United States or any other external source, I would be very, very worried about how we would keep our railways in operation and our basic industries in operation. Therefore I am making the point that that calls for a national policy aimed at maintaining the Canadian coal industry.

Q Would you think there are any other reasons for maintaining it?

A Well, yes, I think there are a good many reasons.

Q Would you like to mention one or two of the more important ones?

A To start off with, the most obvious one is if you let the industry collapse you are immediately precipitating a major economic problem involving a loss of fixed capital, a movement of whole population groups away from mining areas; in other words, the destruction, over a short range at least, of part of your economy.

Q Well, you think that this public assistance, in view of the fact that it is in the national interest to keep the coal industry going, you think that this public assistance should be given to the extent of seeing that capital gets some kind of a reasonable return on its operations?

A Indeed I do.

Q Well, do you also think that public assistance should be given to the extent of seeing that labor gets a Canadian standard of living?

A Indeed I do.

Q So that your suggestion that this wage differential has to be maintained is not correct?

A That is correct. I don't see that that follows.

Q Would you explain?

A You can have and do have wage differentials within industries of the same kind in different regions for a large number of economic reasons. You have a position of this type with which most of us are quite familiar in this area of New Brunswick. The average wage levels are considerably lower than they are in some other economic regions of Canada, and they say, why? In large part I suppose from a strictly economic viewpoint it is determined by productivity.

Q But we are talking about public assistance. When you were suggesting we had to have public assistance to keep this industry going because it was in the national interest to do so, and that would be in part at least in order to give an adequate return to capital, and you also agreed that an adequate return to labor should be given, now if one suggests that an adequate return is what they now get in Nova Scotia it would therefore follow that the New Brunswick miners should get the same as they get in Nova Scotia, wouldn't it?

A I don't see that.

BY MR. FRAWLEY: The Nova Scotia miners aren't getting as much as the Alberta miners are. Now what do you think about that?

A The same thing.

BY THE CHAIRMAN: You know the reason for that. In the old days the cost of living was more than in Nova Scotia.

BY MR. FRAWLEY: And two weeks vacation with pay in Alberta.

BY MR. WADE: I take it you would think there should be a differential between the return to capital, depending on the productivity of capital?

DR. PETRIE: It could be measured that way, I suppose.

Q You referred somewhere to an optimum production of half-a-million tons, is that right?

A Yes, we used the words "optimum production" and used the figure 500,000 tons.

Q You are not suggesting that is all the coal that can be produced in New Brunswick, are you?

A Oh no. We are suggesting that in the best interests of the field as we know it that it should produce that.

Q This particular field, but you are not suggesting there may not be other fields?

A Oh no, we don't know that there are not other fields, but for this field we are suggesting that 500,000 tons is the optimum production.

BY MR. FRAWLEY: We may not have the pleasure of having you before us again, Dr. Petrie. You said that the coalfields of Canada must be preserved in the national interest. Did you accept Mr. Wade's suggestion about that?

A Yes, I said it is important to the welfare of the nation that we maintain a national coal industry.

Q You tied it up with an emergency. It is not to be presumed that we should build our Canadian economy on the fear of war?

BY COMMISSIONER McLAURIN: Not on the fear of war. To be prepared for war.

A I think we must be long-sighted.

BY MR. FRAWLEY: You think for that reason we should be prepared to keep those various coalfields in Canada up to optimum production so as to have lots of coal there for the next war?

BY THE CHAIRMAN: Oh, that is only one reason.

BY MR. FRAWLEY: Have you ever given thought to the fact that we only have 15 per cent of the oil required for our total economy produced within our own borders?

A Yes sir, we are feeling the effects of it too.

Q How are we? Just because there are transportation problems in the United States? They suffer as much as we do.

A Costs too.

Q Costs?

A Costs of getting it here.

Q We don't seem to be afraid of the fact that we are living from day to day with only 15 per cent of our production within our own borders?

MR. TAYLOR: Oh, I believe we are trying to find more oil here and exploit it.

BY COMMISSIONER McLAURIN: We are not trying; the Americans are trying.

MR. TAYLOR: Well, I mean the human race.

BY MR. FRAWLEY: Now Mr. Evans is here, Mr. Streeter, Mr. King--two Mr. Kings. Mr. Taylor has been very good in supplying a lot of answers.

BY COMMISSIONER McLAURIN: Mr. Guss was talking about some matters he might put on the record and we just passed it over at the time. I thought we should indicate he is perfectly free to give us those figures in the morning.

BY THE CHAIRMAN: You are reading a brief in the morning, aren't you?

MR. GUSS: Yes, but that won't come in in the brief.

BY MR. FRAWLEY: Apparently everything has been said by the New Brunswick Coal Producers' Association. We have some time to proceed with the Government brief.

R E C E S S

DR. H. J. ROWLEY. Examined by Mr. Frawley.

Q You are here today to present the submission of the Province of New Brunswick?

A Yes sir.

Q Will you tell us what is the name of this organization of which you are the guiding spirit?

A The organization to which you refer, I believe, is the New Brunswick Resources Development Board.

Q Are you or are you not here particularly in your capacity as director of that organization?

A No, I believe not. That may have been the reason why I was selected to submit this brief.

Q But you are here simply to represent the Province, to make their submission?

A That's right; and I might say it was prepared by Dr. Wright, the Provincial Geologist, and by Mr. Clements, the In-

spector of Mines.

Q Now you are offering this volume, which will be Exhibit 75.

Will you just proceed to put your submission on the record?

A And in addition to that these maps and charts comprise the second part of the submission.

Q I think that as they are referred to we will just give them a separate exhibit number.

DR. ROWLEY: I would wish before beginning the presentation of this brief to indicate, Mr. Chairman and gentlemen of the Commission, that in its production both Dr. Wright and Mr. Clements had every facility afforded them by the operators. They had access to records, to charts and any other data, which was in their possession, and thus they had some fairly dependable basis on which to build.

Dr. Rowley tenders

Exhibit 75 - Submission on the Coal Resources
and Coal Industry of New Brunswick,
Department of Lands and Mines,
Province of New Brunswick.

Dr. Rowley proceeds to read Exhibit 75:

The coal industry of New Brunswick is not large, comparing in volume of yearly output to the single operation at Joggins in the neighboring province of Nova Scotia. Although many coal outcrops have been noted and some few investigated the industry has been, it may be truly said, confined chiefly to that geological area known as the Grand Lake Basin. The operating record for Grand Lake coal dips back into the past for a space of more than three centuries, early Massachusetts Colonial records indicating that an export trade to New England was being carried on as early as 1639. Throughout the years the field has been subjected to the expected series of periods of "ups and downs" and as of this date produces a tonnage of coal approximating one-third of the requirement of the Province, reaching its peak output in 1941 when a total tonnage of 532,449 short tons was won.

In the submission which follows, geological and operational detail relating to this industry, in which from 1000 to

1200 workers are employed and to which some 2500 to 3000 additional dependents look for well being and support, are given with the hope that such data may be of assistance to the Royal Commission in today's session and in its subsequent studies of the coal situation in Canada as a whole.

The Government of the Province of New Brunswick is much interested in its coal resource and wishes its continued operation on as efficient and profitable a basis as is possible in order that maximum good may result to all who depend upon it for their livelihood. This interest is to some degree illustrated by the establishment by Government of a steam electric generating station in the Minto field as part of the Provincial electrical system. The station consumes annually a quantity of slack coal in excess of 80,000 tons.

When confining one's thoughts to a production of 500,000 tons centrally located in an area consuming three times that tonnage annually it would seem that this wish of Government should be readily assured provided reasonable mining cost and quality of product, and so demand, are maintained, and that rail transportation costs are established on such a basis as to assure delivery of Grand Lake coal to any point in the Province of its origin on a truly equitable basis.

New Brunswick is a forest province, eighty percent of its extent being forested. Much regarding its resource picture is as yet not fully known and this is true as related to its geological story. Reference has been made to coal indications in addition to those points where actual workings have been developed: At least twenty-seven outcrops have been noted in ten of the fifteen counties of the Province. Work of investigation on these has not been promising, but there is held the great hope that elsewhere--probably to the north and to the east of the long-worked Grand Lake Basin--economically operable bodies of coal in other basins await the geological studies and drilling operation leading to discovery. Such a plan of exploration--to as great an extent as is possible by provincial

facilities--is planned by the New Brunswick Department of Lands and Mines, and is now in effect in its early stages. Having in mind the known Canadian picture with respect to occurrence distribution, such discovery would not be solely of Provincial interest and value, but would contribute, it is believed, most desirably to the economy of the nation as a whole.

In the past, and very recent past, much assistance by way of study and report has been afforded the Province by Federal authorities, and has been and is greatly appreciated. The studies and report of Mr. Justice M. B. Archibald in 1941, the study conducted by Mr. L. C. Stevens in 1943 as initiated by Mr. E. J. Brunning, and the 1944 report of Mr. E. Swartzman of Dr. B. F. Haanel's Department have afforded constructive assistance and those recommendations will be given full consideration in the long term plan of development now under study by the Department of Lands and Mines for the Province's coal industry. Some few may be quickly applied; others, because of long established custom in this small field of many operators following the accepted principles of private enterprise, may take longer in attaining full acceptance and application.

S U M M A R Y

The Grand Lake field with an annual production of 300,000 to 500,000 short tons of coal is the most important known coal field in New Brunswick. The coal is won chiefly from a shallow main seam which varies in thickness between 18 and 30 inches. The possibility of finding other seams in this basin is very remote. The coal lies in an undulating basin which spreads over an area of about 87 square miles. Probable and possible coal reserves total about 79,000,000 short tons, but underground water difficulties encountered in mining may result in the abandonment of some of the reserves. An extensive drilling programme is required to determine minor details in structure, to delineate the boundary of the coal, and to lay out favorable sites for mining and stripping.

The coal is classified as: Class II, bituminous, Group III, high volatile A. The ash, sulphur and moisture contents of the coal are high. The coal breaks down readily during mining, preparation, loading and shipping, resulting in about 66 percent of $1\frac{1}{2}$ -in. slack. The screened coal can best be cleaned by hand picking. Slack coal can be washed to produce 53.5 percent of clean coal, 30 percent of middlings and 16.5 percent of refuse. Experiments have shown that the clean fraction will make good domestic coke with marketable by-products, chief of which are tar and gas.

Pennsylvanian rocks which contain the Grand Lake coal are widespread in central New Brunswick and outcrops of coal have been found in at least twenty-seven places. Many of these are known to be non-commercial, others are doubtful. There is a reasonable chance that commercial deposits as good as or better than those in the Grand Lake Basin may be found elsewhere in the area of Pennsylvanian rocks.

If I may stop for a moment and point to this exhibit.

Exhibit 76 - Index Map of New Brunswick

The area in blue is the area of Pennsylvanian rocks.

BY COMMISSIONER McLAURIN : It is a map indicating what formation?

DR. ROWLEY: Pennsylvanian. And the red areas throughout this general blue area are localities where coal has been located in seams bearing 4, 6, 8 inches in thickness; this is the Grand Lake Basin.

BY COMMISSIONER McLAURIN: The red indicates the actual coal fields or places where there are outcroppings?

DR. ROWLEY: Outcrops.

BY COMMISSIONER McLAURIN: Well, the big red splotch is Minto, isn't it?

DR. ROWLEY: That's right.

BY MR. FRAWLEY: Are those other areas being mined?

DR. WRIGHT: That will be mentioned a little later in the brief.

DR. ROWLEY continues brief:

In New Brunswick coal is reserved to the Crown. The administration of the Mining Act is devolved upon the Department of Lands and Mines and the Minister is charged with the duty of carrying out and enforcing its provisions. There are three classes of rights under the Act: prospecting licenses, mining licenses, and mining leases. Mining claims may be staked under authority of a prospecting license and these claims may be renewed for one year. Mining licenses may be renewed from year to year on proof of assessment work. Mining leases are granted for twenty-year periods.

In 1944 there were, in the Grand Lake Basin, forty-eight licensees and lessees; twenty-one carried on mining. The production was 334,503 short tons. In 1942 the consumption of bituminous coal in New Brunswick was 1,515,775 tons, of which less than one-third was produced within the province. Most of the coal mined by underground methods comes from shafts. Stripping operations in 1944 produced 27.4 percent of the total production.

Housing conditions in the coal mining areas are not of good standard.

There is one medical doctor in Minto and one in Chipman. Minto has an eight-bed hospital.

There are two unions in the field: District Twenty-six United Mine Workers of America and the Rothwell Miners Union.

In the "Preamble to Recommendations" attention is drawn to three important reports: (1) Minto Coal Mines--Mr. Justice M. B. Archibald--1941, (2) Review of Minto Area--L. C. Stevens--1943, (3) A Report on a Plan for the Beneficiation of the New Brunswick Coal Industry--E. Swartzman--Fuel Research Laboratories, the Bureau of Mines, Ottawa--1944. It is believed that under existing laws and customs the initiative for consolidation of mining rights cannot be taken by the Provincial Government, but is a matter for the consideration of the licensees and lessees. Reallocation of mining rights, however, is being given

consideration by the Provincial Government. A central marketing agency, it is believed, should serve all sales from the field. This agency might carry on research as to the types of grates and furnaces for the coal. In many instances the existing freight rate structure is considered to favor the movement of coal from points outside the province into the province rather than movement of New Brunswick coal from point to point within the province. In the interest of the industry no mines should be opened until the production is needed and the market is assured. With regard to beneficiation and coking of the coal it is not yet clearly known whether it would be more economical to have but more careful preparation or include mechanical cleaning or coking. A study of the products and markets would determine the course to follow. Water conditions in the mines in certain areas are very serious and unless means of alleviating this situation are brought about it is felt that the cost of water removal would render areas unmineable. A diamond drilling programme in the basin would assist in: (1) delineating the boundaries, structure and nature of the coal in unexplored areas, (2) providing additional information regarding minor structures, (3) outlining stripping areas, (4) providing information for a long term plan in the field. Large areas of Pennsylvanian rock in central New Brunswick merit careful geological study in the hope that favorable areas may be found and which could then be drilled for coal. In addition, this geological study would possibly assist in providing data concerning petroleum possibilities.

A hospital exists in the field, its need is definite and its continued existence should be assured by co-operative effort.

A list of recommendations concludes the brief.

COAL DEPOSITS OF NEW BRUNSWICK

Summary

The production of coal in New Brunswick is limited to two localities as follows:- (1) The Grand Lake coal field in the vicinity of Minto and Chipman with an annual production of 300,000 to 500,000 tons per year from a seam which varies in thickness from 16 to 30 inches. (2) Beersville, in Kent County, with an annual production of about 300 tons from a seam 12 to 16 inches thick. Many other outcrops of bituminous coal are known, see Plate 45-5 (Exhibit 76) but most of them show a seam less than 12 inches thick. The exceptions are at Caraquet, Dunsinane, Clones, and North Tay, where seams of appreciable thickness have been reported. Two other deposits, known for many years, are the so-called anthracite deposits of Lepreau and Chance Harbour, where some years ago large sums were spent in exploratory work.

The Beersville deposit has been estimated to contain 24,000,000 tons of coal (1). The seam is much thinner than that in the Grand Lake area, and exploratory work to date leads to the conclusion that the field is not of immediate value. The Provincial Government drill was used to explore the seams at Caraquet, Dunsinane and Clones without encouraging results. In 1942 three holes were drilled at Chance Harbour with negative results, and three holes were drilled at Lepreau, cutting both of the "anthracite seams". The cores of the seams showed interlaminated graphitic shale and bituminous coal, and the best looking sections of the cores analysed more than 80 percent ash (2).

I might say I have samples. Would you be interested in seeing those at this time? (Samples not marked as exhibits).

(1) Brown, J.F.K., "Mining Thin Coal Seams etc.", Mines Branch, Ottawa, Pub. No. 432, p. 11.

(2) Wright, W.J. and Clements, C. S., "Coal Deposits of the Lepreau-Musquash District." See copy attached.

DR. ROWLEY continues brief:

The North Tay deposit was drilled by hand with encouraging results. Further drilling is contemplated by the Provincial Government in search of seams of economic value.

All of the coal deposits in New Brunswick occur in sedimentary rocks of Pennsylvanian age, deposited in the same geological period as those which contain the coal in Nova Scotia. The distribution of Pennsylvanian rocks in New Brunswick is shown on Plate 45-5 (Exhibit 76).

THE GRAND LAKE COAL FIELD

Location and Topography

The Grand Lake coal field is centrally located in southern New Brunswick, see Exhibit 76, along the northern side of Grand Lake. It is about 32 miles from Fredericton, 56 miles from Moncton and Saint John, and 68 miles from Newcastle. Minto and Chipman are the chief centres of population. The region is gently undulating with a maximum relief of 500 feet. It is drained by the Salmon River, Newcastle Creek, Little River, and Coal Creek, which flow southerly into Grand Lake, a large body of fresh water whose summer level is 3 to 4 feet above mean tide level. The mines lie amid farm lands and woodlots, with unbroken forests to the north-west. They are served by the Canadian Pacific and the Canadian National Railways, and by good roads. Barges may be moved through Grand Lake to Saint John and Fredericton via the Saint John River.

History (1)

Coal was shipped from the Grand Lake field to the New England States as early as 1643. In early operations the coal was won by hand stripping and short adits along outcrops of the

(1) King, A. D., and Johnson, J. J. "Mining Methods in the Grand Lake Coal Field." Can. Min. and Met. Bull. 278, p. 295, 1935.

(1) The Historical Guide to New Brunswick says Massachusetts Colonial Records indicate that coal export to New England was being carried on as early as 1639.

seam, and later by shallow shafts from which the coal was hoisted by horses. In 1892 steam hoists were introduced. In 1905 a clam-shell was first used for stripping, followed by steam shovels and drag lines in 1914. In 1921 coal cutting machinery was introduced, followed by shaker screens, picking tables, and crushers, and in 1931 the power plant erected by the Provincial Government afforded electric power, since which time most of the mines have been electrified. In early days the coal was shipped by wagons and by water. In 1890 a railway was built from Norton to Chipman; it was extended to Minto in about 1904, and to Fredericton about 1912. This line was later taken over by the Canadian Pacific Railway. In 1924 a spur line was built from Minto to Hardwood Ridge, affording an outlet to the Canadian National Railway. In 1944 a large part of the Minto area was swept by a fire which burned several surface plants.

BY THE CHAIRMAN: Those barges from Grand Lake down to Saint John, that might be an answer to the transportation problem in the summer months?

DR. ROWLEY: It might be a solution, although I understand that some dredging would have to be done to Salmon River and Jemseg. Isn't that right, Mr. Evans?

MR. EVANS: I believe so, but it is only for the summer. It is frozen up in winter.

BY MR. FRAWLEY: So is the St. Lawrence. Dosco has found that out.

DR. ROWLEY continues brief:

General Geology (1)

The geological sequence is shown in tabular form on the following page. The oldest known rocks in the district (Coal Creek formation) are moderately disturbed grey sandstone and argillite.

BY MR. FRAWLEY: This Pennsylvanian, that is a limestone, is it?

(1) Dyer, W.S. "Minto Coal Basin, New Brunswick." Geol. Surv. Can. Memoir 151, 1926.

GEOLOGICAL SEQUENCE, GRAND LAKE COAL BASIN
Modified after Dyer (2)

Name	Summary Description	Age
	Aluvium, soil and swamp deposits	Recent
Glacial drift	Stratified & unstratified glacial drift. Thickness 0 to 50 ft.	Pleistocene
	Loose period of erosion	
Grand Lake formation	Upper member. Buff-weathering, grey sandstone and gravel-stone Thickness 100 ft.	
	Middle member. Shale with some sandstone. Coal seam at the base. Thickness 75 ft.	Pennsylvanian
	Lower member. Coarse grey sandstone and gravel-stone. Thickness 300 ft.	
	Disconformity. No evidence of erosion.	
Basalt flow	Amygdaloidal basalt. Thickness 0 to 100 ft.	
	Disconformity. No evidence of erosion	
Newcastle Creek formation	Red and grey quartzose conglomerate. Thickness 0 to 50 ft.	Pennsylvanian (?)
Coal Creek formation	Interbedded slaty shale and sandstone. Thickness unknown	Devonian (?)

DR. ROWLEY: Sediment, yes.

BY MR. FRAWLEY: It is a local name for it?

DR. ROWLEY: No, Pennsylvanian is a geological classification.

DR. WRIGHT: Pennsylvanian is the formational name for the coal measures all over North America..

DR. ROWLEY continues brief:

They are cut by numerous veins of quartz-carbonate, and in some instances assume the form of graphitic and chloritic schists. Fossils have not been found in this group, but it is inferred to be of Devonian age. Erosion has exposed some of these rocks in Coal Creek, and they have been encountered below the Carboniferous rocks in six deep drill holes, so they are inferred to underlie the whole basin. The Coal Creek formation is overlain non-conformably by local deposits of approximately horizontal red conglomerate (Newcastle Creek formation) and basalt.

The Grand Lake formation contains the coal and is the youngest formation of consolidated rocks in the region. Erosion has spared a total thickness of about 500 feet of grey sandstone and shale, with appreciable portions of reddish sandstone and shale near the top. Fragments of plants which have been changed to coal are common in the grey beds, and well preserved impressions of ferns, commonly associated with the coal, serve to fix the age as Pennsylvanian (1), and to correlate the deposit with the Tracy seam in the Cape Breton coal field.

The coal occurs in the central part of the Grand Lake formation, with a maximum cover of about 170 feet. The "Main Seam" varies in thickness from 16 to 30 inches. In the Minto district, one or more 2- to 6-inch seams are usually associated with the main seam, and in some operations, one of the minor seams is mined with the main seam. The coal is usually under-

(1) Dyer, W. S. "Minto Coal Basin, New Brunswick." Geol. Surv. Can. Memoir 151, 1926.

lain by 2 to 4 feet of irregularly bedded to massive grey, root-bearing, "fire clay", and overlain by 2 to 5 feet of laminated greenish grey shale, "coal rock" which is the main horizon of fossil ferns. In some areas, the coal rock is missing and the seam is overlain directly by hard, massive sandstone. With two minor exceptions available records of mining and drilling show that the seam occurs in its proper horizon as far east as the Dufferin Road, beyond which line reliable data is not available.

In post-Pennsylvanian times the rocks were warped into irregular folds with gently dipping flanks, and as far as we know erosion was the chief geological activity until Pleistocene time. Scanty geological evidence indicates that during this time interval, estimated as 250,000,000 years, the Grand Lake formation stood above sea level and was subjected to weathering and erosion. An unknown thickness of rocks was removed, possibly rocks containing coal seams like those preserved at Sydney, and the basal measures with one main seam were preserved in down-warped basins, and even these basins were dissected by pre-glacial streams. The advancing ice sheet of Pleistocene time removed the mantle of residual soil, and the retreating ice deposited a mantle of boulder clay, sands and gravels.

Glaciation introduced three factors which have an important economic bearing on the coal industry.

(1). The glacial deposits, "glacial drift", tended to level-off pre-glacial valleys from which the coal had been eroded. In some notable instances, post-glacial streams sought new channels, and the presence of ancient valleys is not suspected until they are encountered by mining, and drilling.

(2). Where the drift was deposited directly on the coal, it served to protect the seam from later weathering and erosion, and thus to preserve many acres of "shallow" coal for stripping.

(3). Where the coal is mantled only by glacial drift its presence cannot be postulated by ordinary geological methods. Closely spaced drill holes are required to block out productive ground, and even they may miss barren patches.

Possibility of Other Seams

Coal is found only in sedimentary rocks, and rocks of this class in the Grand Lake area are limited chiefly to two formations, namely the Coal Creek formation at the base and the Grand Lake formation at the top.

Coal Creek Formation

Rocks correlated with the Coal Creek formation are exposed over broad areas of south-western New Brunswick and in the adjacent State of Maine. One characteristic feature of these rocks is the rarity of organic remains, and the absence of coal. Geologically they are older than the productive coal measures of North America. Furthermore, they are sheared, moderately to steeply dipping, and cut by numerous veins of quartz and carbonates. The chance of finding commercial coal in these measures is very remote.

Grand Lake Formation

If the conclusions in the preceding paragraph are correct, the possibility of finding other seams in the Grand Lake area is limited to the Grand Lake formation, above or below the present surface seam.

Drilling and prospecting in the Grand Lake area have not found indications of an upper seam worth mining. All interested parties agree that the possibility of finding an upper seam is remote. There are, however, many advocates of the theory that lower seams exist. This belief is based on the assumption that the Grand Lake seam corresponds with some one of the upper thin seams at Sydney. Available data on the possibility of lower seams are outlined in the following paragraphs.

Fossil plants from the coal rock which immediately overlies

the main seam have been studied by Dr. W. A. Bell (1) of the Geological Survey of Canada. He has identified 37 species and concludes that the surface seam is older than the main productive coals of the Sydney, Cape Breton, coalfield, and is probably not far removed from the horizon of the Tracy Seam which underlies the seams which are being mined at Sydney. The relative geological positions of the Tracy seam and the Minto seam are shown graphically on the following page.

Would it be of interest if Dr. Wright should give a few words of explanation?

BY THE CHAIRMAN: Certainly.

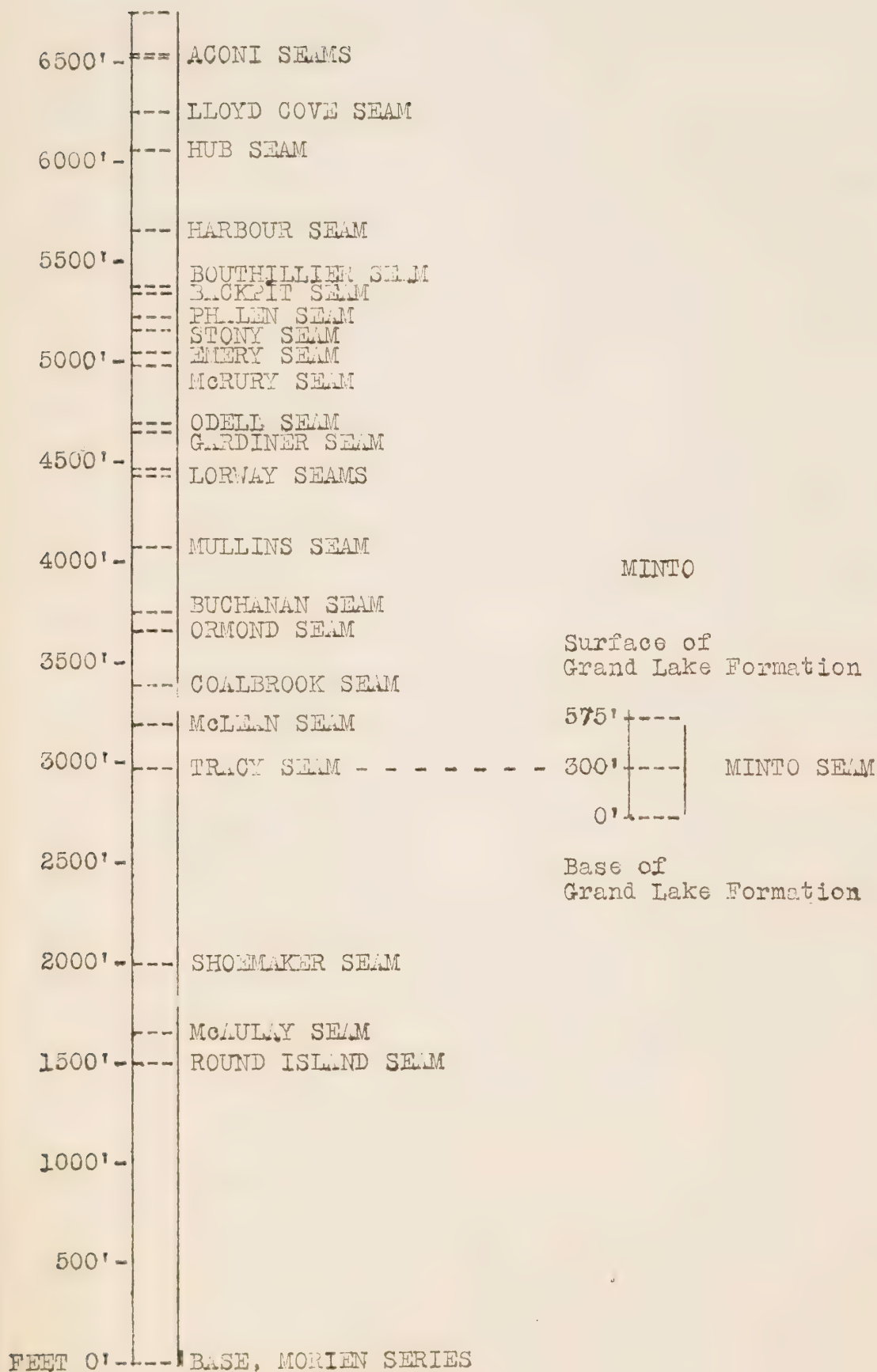
DR. WRIGHT: This table (page 1405) is reproduced from Dr. Bell's report, and anyone interested in the coalfields of Cape Breton will recognize Dr. Bell as an authority. It shows the thickness of the coal measures at Sydney for 6500 feet, as shown by the left-hand column. In the Minto district we only have 575 feet of measures preserved, and the Minto seam, situated about midway between the top and bottom, corresponds to the Tracy seam, so if we look for the thick coal seams of Sydney, they either have never been deposited in the Grand Lake basin or they have been completely removed by erosion.

DR. ROWLEY continues brief:

Seven holes have been drilled through the Grand Lake formation into the underlying rocks of Devonian age. The first recorded hole was drilled in the years 1837-39 with a churn drill and reported 8 feet of bituminous shale and coal between depths of 253 and 260 feet. In 1903 a hole was drilled with the Provincial Government diamond drill about 100 feet from the old hole. It passes through the Grand Lake formation at a depth of 217 feet and from there down to 362 feet it cut shale, quartz rock, and other hard rock. In addition to these two holes, three were drilled in 1873, two in 1903, one in 1919, and one in 1944. All of them reached the bottom of the

(1) See Dyer's Report on the Minto Coal Basin, pp. 18 and 19.

VERTICAL RANGE OF COAL AT SYDNEY AND MINTO

SYDNEY¹

1. Note. After W. A. Bell, Geol. Surv. Can. Memoir 215, Fig. 1, P. 2.

Grand Lake formation at depths of 217 to 357 feet and cut into the Coal Creek formation without encountering a lower seam. The core of the 1944 hole showed appreciable quantities of black graphitic partings which leads to the suggestion that the fragments of "bituminous shale and coal" bailed from the 1837-39 hole may have been graphitic material.

Several able geologists including Dr. L. W. Bailey, Dr. R. W. Ellis and Dr. W. S. Dyer have studied available data on the field and conclude that the possibilities of finding economic coal seams below the "Surface Seam" are very remote.

BY THE CHAIRMAN: How would the depth of 375 feet compare with the depth of the Tracy seam?

DR. WRIGHT: The Tracy seam is exposed today at the surface due to the attitude of the bed; they are lying, one seam above the other, like shingles and the Tracy seam is exposed, and it is at an elevation of 3,000 feet below the Pennsylvanian in Cape Breton.

BY THE CHAIRMAN: Well then, in order to indicate that there is coal on the same basin as the Tracy seam you would have to go much further down the Grand Lake?

DR. WRIGHT: No sir, the argument in the previous paragraph is that the base of the Grand Lake formation is very thin and at the depth of 300 feet you cut into the old Devonian formation that is not favorable for coal. That is, we argue that there is no practical purpose in drilling that formation. As soon as you strike that you should quit.

DR. ROWLEY continues brief:

Structure of Coal Seam

The Grand Lake coal deposit lies in an undulating basin which stretches for a distance of about 20 miles along a bearing of N 70° E and is about 6 miles in maximum width. Total area is roughly 87 square miles. In the central part of the basin the coal lies about 50 feet below sea-level, and

the highest known part of the seam (along the northern side) is about 270 feet above sea-level. The average angle of dip varies from horizontal to 5 degrees, increasing in rare instances to 15 and 20 degrees. Small faults, apparently normal, with a vertical throw of 2 to 5 feet are not unusual, and one small overthrust fault has been discovered. Regular lines of cleavage, "face cleat", are present in the coal.

(Page 1410 follows)

The sub-surface contours lines shown on plate 45-3 (Exhibit 77) are drawn on the base of the coal. They are based on information obtained by drilling and mining supplied by the operators and compiled by the Provincial Geologist. The data is more voluminous than that available in 1926 and the contour lines differ in some instances from those shown on Dyer's map. These lines in conjunction with surface contours, not shown on Plate 45-3 (Exhibit 77) assist in estimating the depth of the coal, and in forecasting the probable position of the seam in adjacent areas which have not been drilled.

Ten-foot contours show only the general attitude of the seam, and do not outline numerous irregularities which have a vertical magnitude of less than 10 feet. These minor irregularities are of great economic importance because they interfere with the natural flow of water along levels which follow the seam and form many wet areas in the underground workings. As far as we know the only way to locate the minor irregularities ahead of mining operations is by drilling at intervals of less than 50 feet, or possibly by detailed geophysical surveys. Either of these methods is an expensive undertaking, and would add materially to the cost of development.

Ground Water

The Grand Lake formation is made up of jointed massive and laminated sandstone, separated by impervious shale, an ideal stratigraphy for storage and flow of underground water. Collecting areas for the artesian waters are afforded by outcrops of strata around the margins of structural depressions, by the porous nature of the unconsolidated rock cover, and by artificial ponds formed by stripped areas and abandoned mines. An appreciable portion of the underground water moves along the approximate coal horizon and effects problems in mine drainage. Excessive stores of underground water in closed basins such as those in Midland and Chipman

districts, have undoubtedly been a factor in some unsuccessful attempts to mine the coal.

The question has been raised as to the feasibility of deflecting some of the ground water at its source. Possibly an expert in this branch of engineering could suggest methods and costs for this project, and show that diversion would be cheaper than more elaborate pumping systems in the mines.

Subdivision of the Basin

The coal is so near the present surface over most of the area that it has been removed by erosion from the high points and along the main stream valleys. As a result the Grand Lake basin is divided into several districts. The districts are shown on Plate 45-3 (Exhibit 77) and listed in a later paragraph on coal reserves.

The boundaries of the districts as laid down on the map are based on information obtained by mining and drilling. In some instances they are as accurate as the scale of the map will allow, in others they are only approximate, and still others even the approximate boundaries are not known. An extensive drilling program is necessary before these boundaries can be ascertained. The accepted method of drilling in the area is by ingenious hand drills, operated by two to four men. They are designed to bring the sludge to the surface, and experienced drillers decide on the position and thickness of the seam by means of the sludge and the "feel" of the drill. This type of drilling serves to prospect the seam even in the deepest parts of the basin. Informal discussions are under way between the operators and the Department of Lands and Mines about the feasibility of drilling program with the Provincial diamond drill with object of obtaining a core of the coal. The first stage of the program, if adopted, will be to find out whether or not the diamond drill will produce a good core of relatively soft coal.

BY MR. FRAWLEY - Dr. Potrie, I overlooked asking you one question. Can you express in percent the quality between the Minto coal and the competitive Nova Scotia coal, all other things being equal and just having in mind difference in quality?

A. In 1939 it was about 21%, the price spread.

BY MR. TAYLOR - Actually any comparison that was made was between our coal and Sydney coal, and the fuel value was about 15%, that is in terms of B.T.U., that Sydney was 15% better than our's. We didn't carry it through the various other Nova Scotia coals; that is, Springhill is not quite as good as the Sydney, and Maccan is not as good as Springhill. Our comparison of 15% was calorific value.

BY MR. FRAWLEY - So you had 15% in calorific value?

A. Yes.

Q. And about 21% difference in price?

A. Yes.

5:00 P.M. HEARING ADJOURNED

A P P E N D I X "A"

STATISTICAL TABLES

TABLE NO. 1

Relationship between the Net Value of Coal
Production and the Net Value of Total of
All production in New Brunswick.
1930 - 1942.

Year	Net Value of Coal Production ¹	Net Value of Total Production ²	Ratio of Coal Production to Total
	\$000	\$000	%
1930	864	78,773	1.9
1931	743	64,308	1.2
1932	794	54,064	1.5
1933	1,042	50,036	2.1
1934	1,026	55,405	1.8
1935	1,129	58,946	1.9
1936	1,190	63,573	1.9
1937	1,181	71,137	1.7
1938	1,566	70,048	1.6
1939	1,566	75,136	2.1
1940	1,962	90,119	2.2
1941	2,021	103,968	1.9
1942	1,826	128,163	1.4

1. Figures taken from Coal Statistics for Canada, 1942.

2. Figures taken from Canada Year Book, various editions.

Note: "Total production" includes the production of
the following industries -- agriculture,
forestry, fisheries, mining, electric power,
construction, custom and repair, and
manufacturing.

Employment and Earnings in the Coal Mines of New Brunswick, 1933 - 1942

Average No. of Employees	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942
Surface	209	202	241	258	273	253	284	360	380	319
Underground	816	833	895	900	777	867	1,000	1,046	942	714
Total	1,025	1,035	1,136	1,158	1,150	1,120	1,284	1,406	1,322	1,033
Days' Work Done										
Surface	46,079	46,721	57,118	60,723	66,677	50,433	75,828	94,393	97,753	77,950
Underground	210,129	190,463	207,811	208,134	190,000	184,959	254,650	201,284	254,908	193,022
Total	256,208	237,184	264,929	268,857	256,677	235,392	330,478	385,677	352,661	270,972
Average No. of days worked per man per year										
Surface	220	231	237	235	244	199	267	262	257	244
Underground	258	229	232	231	245	213	255	278	271	269
By all wage earners	250	229	231	232	244 ¹	210 ¹	257	274	267	262
Total Wages Paid	\$ 861,408	\$ 678,844	\$ 729,600	\$ 768,025	\$ 756,883	\$ 742,884	\$ 1,055,509	\$ 1,223,177	\$ 1,251,207	\$ 1,143,562

Source: Coal Statistics for Canada, 1937, 1942.

1. Strike loss was 90 days in these two years.

TABLE NO. #

Relationship between Salaries and Wages Paid by the
New Brunswick Coal Mining Industry and Total
Salaries and Wages Paid by All New Brunswick Employers,
1933 - 1938

Year	Salaries and Wages Paid in N. B. Coal Industry	Total Salaries and Wages Paid by All Employers in N.B. ²	% Coal Wages to Total
	\$000	\$000	%
1933	861	52,437	1.6
1934	679	55,363	1.2
1935	730	60,592	1.2
1936	768	63,401	1.2
1937	757	69,557	1.1
1938	743	69,178	1.1

1. Source: Coal Statistics for Canada, 1937, 1942
(Dominion Bureau of Statistics, Ottawa).
2. Data provided by the Dominion Bureau of Statistics.
See also Report of the N.B. Committee on Reconstruction
(1944), at p. 183.

TABLE NO. \$

Comparative Figures on Employment and Payrolls in
the Coal Mining and Major Manufacturing Industries
in New Brunswick, 1941

Industry	Total Salaries and Wages	Number of Employees	Average Pay per Capita
	\$000		\$
Coal Mining	1,251	1,322	946
Pulp and Paper	4,867	2,914	1,670
Sawmills	2,618	3,763	695
Cotton, yarn and cloth	1,152	1,167	987
Heating and cooking apparatus	711	582	1,222
Planing mills, sash and door factories	649	652	995
Fish curing and packing	607	1,043	582
Biscuits, confectionery etc.	598	728	821
Bakery products	506	583	868
Meat Packing	318	245	1,298
Butter and cheese factories	281	312	901
Boots and shoes	202	250	808

Source: Manufacturing data taken from Manufacturing Industries
of the Maritime Provinces, 1941, Dominion Bureau of
Statistics, Ottawa.

TABLE NO. 5.

Capital Employed in the Coal Mines of New Brunswick
1936 - 1942

Year	Land, Buildings, Machinery and Tools	Supplies and stock on hand	Cash, Trading and Operating Accounts and Bills Receivable	Total
1936	1,026,542	68,517	275,622	1,370,681
1937	935,121	32,419	341,229	1,308,769
1938	628,675	33,159	217,532	879,366
1939	776,612	37,874	392,420	1,206,906
1940	932,347	36,360	494,612	1,465,319
1941	894,214	57,566	526,292	1,478,072
1942	849,793	46,722	489,914	1,386,429

Source: Coal Statistics for Canada, 1937 - 1942, Dominion
Bureau of Statistics.

TABLE NO. 6

Amount of Fixed Capital¹ Investment per
Ton of Coal Mined in Canada, by
Provinces, 1936 - 1942.

Province	1936	1937	1938	1939	1940	1941	1942
	\$	\$	\$	\$	\$	\$	\$
New Brunswick	2.78	2.56	1.84	1.66	1.70	1.71	1.95
Nova Scotia	5.56	5.75	5.76	4.71	4.06	4.47	4.42
Saskatchewan	2.55	2.57	2.69	3.90	2.71	2.25	2.09
Alberta	5.52	5.56	5.71	5.40	4.39	4.17	3.73
British Columbia	10.72	14.11	16.07	11.51	10.41	9.55	9.24

Source: Compiled from data in Coal Statistics for Canada,
1937 - 1942,

1. Fixed capital includes land, buildings, machinery and tools.

TABLE NO. 7.

Output and Value of Coal Produced from
New Brunswick Mines, 1889 - 1944.

Year	Output (Short Tons)	Value ²	Average Value Per Ton
1889-1893 (average)	6,235	11,165	\$1.79
1894 - 1898 (average)	7,126	10,801	1.52
1899-1903 (average)	14,591	32,466	2.22
1904-1908 (average)	33,434	71,598	2.14
1909-1913 (average)	55,071	115,433	2.10
1914-1918 (average)	165,257	595,287	3.62
1919	166,577	735,586	4.42
1920	171,610	1,091,440	6.36
1921 ¹	187,192	920,666	4.92
1922	287,513	1,107,643	3.85
1923	276,617	1,196,772	4.32
1924	217,121	932,185	4.29
1925	208,012	815,367	3.92
1926	173,111	710,245	4.10
1927	203,950	885,038	4.34
1928	207,738	869,104	4.11
1929	218,706	909,169	4.16
1930	209,349	864,118	4.13
1931	182,181	743,196	4.08
1932	212,695	794,168	3.73
1933	312,305	1,041,744	3.33
1934	314,750	1,026,343	3.26
1935	346,024	1,129,019	3.26
1936	368,618	1,190,032	3.23
1937	364,714	1,180,611	3.24
1938	342,238	1,133,346	3.31
1939	468,421	1,566,359	3.34
1940	547,064	1,961,863	3.59
1941	523,344	2,021,394	3.86
1942	435,203	1,826,403	4.20
1943 ¹	372,873	1,641,069	4.40
1944 ¹	347,032	1,862,829	5.37

Sources: Compiled from Coal Statistics for Canada, 1942,
(Dominion Bureau of Statistics, Ottawa) p. 47

1. 1943 and 1944 figures taken from Preliminary Estimate of
Canada's Mineral Production for the Calendar Year 1944
(D.B.S., Jan. 2, 1945), and are subject to revision.

2. Value f.o.b. mines.

TABLE NO. 8

Output of coal from New Brunswick Mines, by Months, 1934 - 1944
(Short Tons)

Month	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
January	29,549	35,198	36,836	40,359	25,855	37,337	47,234	44,138	39,918	31,027	27,167
February	30,219	34,736	39,476	41,362	29,320	42,934	45,518	46,245	36,449	31,017	26,680
March	31,742	37,805	25,089	44,070	37,714	46,164	44,762	49,662	36,389	29,633	30,450
April	19,570	23,298	30,269	34,325	27,487	36,362	41,968	38,858	32,384	29,030	25,617
May	24,622	26,229	27,571	37,896	21,497	26,315	46,586	47,845	35,079	30,996	23,187
June	17,136	22,299	23,585	36,599	24,249	39,827	43,511	44,048	38,664	30,921	26,439
July	23,124	22,069	26,110	32,528	20,056	35,233	45,311	45,755	37,132	33,466	37,836
August	24,984	26,448	22,981	31,260	21,603	34,523	48,180	44,283	42,440	31,179	26,532
September	27,142	22,561	28,843	32,722	26,860	36,827	40,361	42,068	36,976	36,791	32,766
October	26,500	32,605	32,856	17,539	30,028	40,090	52,017	45,067	37,254	30,784	32,137
November	30,664	27,240	36,325	12,172	38,601	43,092	49,252	35,672	32,884	29,316	31,298
December	29,498	35,536	38,677	13,882	38,968	39,717	42,364	39,703	29,634	29,006	
Total	314,750	346,024	368,618	364,714	342,238	468,421	547,064	523,344	435,203	373,166	

TABLE NO 9

Ratio of Stripping to Total Coal Produced
from the Minto Coal Field, 1935 - 1943
(Net Tons)

Year ¹	Total Output	Tonnage Stripped	Percentage Stripped
1935	337,887	15,493	4.6
1936	347,988	21,856	6.2
1937	399,186	35,188	8.8
1938	290,388	39,892	13.7
1939	464,112	71,169	15.3
1940	530,469	86,750	16.4
1941	532,449	112,922	21.2
1942	445,329	107,159	24.1
1943	568,554	96,853	26.3
1944	334,490	91,518	27.3

Figures provided by the N.B. Department of Lands and Mines.

1. Note: these figures are for the fiscal year, Nov. 1 - Oct. 31, and differ, therefore, from calendar year figures presented elsewhere.

TABLE NO. 10

Average Output of Coal per Man-Day in New Brunswick
and other Coal Mining Provinces, 1936 - 1942.

Province	Average Output per Man-Day in Short Tons						
	1936	1937	1938	1939	1940	1941	1942
New Brunswick	1.371	1.420	1.454	1.417	1.418	1.484	1.606
Nova Scotia	2.276	2.211	2.244	2.343	2.305	2.049	2.080
Manitoba	1.254	1.446	1.509	1.224	2.170	1.546	1.684
Saskatchewan	5.231	5.226	5.242	5.853	7.202	8.347	7.865
Alberta:							
Bituminous	3.529	3.479	3.556	3.745	3.890	3.786	3.629
Sub-Bituminous	3.464	3.409	3.346	3.608	3.762	4.049	3.505
Lignite	3.265	3.426	3.529	3.436	3.514	3.588	3.649
British Columbia	2.171	2.156	2.224	2.430	2.608	3.036	2.998
Canada	2.643	2.598	2.672	2.755	2.775	2.759	2.795

Source: Coal Statistics for Canada, 1937, 1939, 1941, 1942,
Dominion Bureau of Statistics.

Note: As far as can be ascertained, employees under contract stripping in New Brunswick were not included in the above compilation, so that these data do not reflect the picture accurately.

TABLE NO. 11

Tonnage Lost in the Coal Mines of New Brunswick,
Nova Scotia, Alberta and British Columbia, with
Loss Analysis, 1936 - 1942.

Province	Year	Per Cent Produced	Per Cent Lost	Percentage Absent-ism	Percentage lost through Lack of Orders	Percentage lost through Car Short- ages	Percentage lost through Disa- bility	Percentage lost through Other Causes
N. B.	1936	74	26	2.4	22.4	0.0	0.7	0.5
	1937	78	22	2.6	17.0	0.0	2.1	0.3
	1938	67	33	2.2	28.2	0.1	1.4	1.1
	1939	82	18	2.2	13.2	-	1.2	1.4
	1940	88	12	3.2	6.2	-	1.7	0.9
	1941	88	12	3.3	5.0	0.1	2.6	1.0
	1942	83	17	5.4	1.8	-	6.2	3.6
N. S.	1936	70	30	1.1	27.1	0.0	0.8	1.0
	1937	77	23	2.7	16.9	-	1.6	1.8
	1938	63	37	1.5	33.5	-	1.0	1.0
	1939	73	27	1.9	22.9	0.1	0.8	1.3
	1940	80	20	5.4	9.4	1.5	1.7	2.0
	1941	82	18	9.2	1.1	0.2	3.7	3.8
	1942	80	20	11.6	2.4	0.3	3.0	2.7
Alberta	1936	70	30	0.3	29.4	0.1	0.0	0.2
	1937	69	31	0.5	30.1	-	0.1	0.3
	1938	67	33	0.6	31.7	-	0.4	0.3
	1939	71	29	0.5	28.2	-	0.2	0.1
	1940	76	24	0.8	22.8	-	0.3	0.1
	1941	83	17	1.6	13.6	1.0	0.3	0.5
	1942	88	12	3.9	6.3	0.1	0.7	1.0
British Columbia	1936	81	19	0.1	17.9	0.3	0.0	0.7
	1937	82	18	0.2	16.8	0.1	-	0.9
	1938	74	26	0.1	25.5	-	0.3	0.1
	1939	79	21	0.3	19.9	0.2	0.1	0.5
	1940	85	15	0.1	14.0	0.7	-	0.2
	1941	88	12	-	9.2	1.9	0.1	0.8
	1942	93	7	3.1	0.7	0.1	0.3	2.8

Source: Coal Statistics for Canada, 1937 - 1942.

TABLE NO. 12

Relative Importance of the Various Grades
of coal Shipped from the New Brunswick
Coal Mines

Grade	Per Cent of Total Output						
	1937	1938	1939	1940	1941	1942	1943
	%	%	%	%	%	%	%
Stripping ¹	11.6	9.3	11.4	18.3	18.0	6.8	7.2
Run-of-mine	26.8	32.3	27.5	22.2	26.0	38.0	41.7
Lump	38.6	37.4	36.3	39.1	34.9	51.3	27.4
Nut and other Grades	0.8	1.5	1.5	1.0	0.8	0.5	0.8
Slack	22.2	19.5	23.3	19.4	20.3	23.4	22.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from Coal Statistics for Canada, 1937 - 1942.

1. Note: This does not represent the ratio of stripping output to total output. The ratios indicate the relationship of each grade of coal shipped to the total shipments. Some stripping coal is screened, and will therefore appear as lump or slack.

Comparative Coal Mine Operating Costs and Revenues per Net Ton of Marketable Coal
in New Brunswick, Nova Scotia and Canada, 1939, 1941 - 1943.

Operating Costs	1939			1941			1942			1943		
	N.B.	N. S.	Canada	N.B.	N.S.	Canada	N.B.	N.S.	Canada	N.B.	N.S.	Canada
Distribution	.111	.536	.339	.116	.528	.294	.157	.513	.282	.13	.44	.24
Workmen's Compensation	.128	.107	.098	.131	.116	.105	.121	.115	.109	.13	.14	.15
Rent and Royalties	.120	.128	.107	.127	.130	.102	.102	.113	.093	.12	.12	.10
Insurance and Taxes	.044	.083	.077	.064	.068	.101	.189	.084	.118	.07	.11	.14
Administration & Misl.	.252	.178	.179	.278	.199	.165	.340	.196	.158	.43	.26	.19
Bond & General Interest	.015	.058	.034	.014	.046	.024	.015	.066	.032	.04	.08	.05
Power	.081	.234	.194	.107	.240	.172	.096	.282	.185	.12	.32	.20
Depreciation & Depletion	.235	.216	.232	.244	.195	.215	.274	.187	.212	.33	.21	.24
Stores	.415	.420	.341	.376	.548	.402	.357	.553	.414	.39	.70	.47
Labour	2.025	2.246	1.877	2.626	2.613	2.029	2.857	2.888	2.180	3.29	3.40	2.40
Total	3.426	4.206	3.478	4.083	4.683	3.609	4.508	4.907	3.783	5.05	5.78	4.16
Revenues:												
Coal sold, used by Company												
and stock adjustments	3.390	4.193	3.434	3.971	4.352	3.461	4.421	4.760	3.669	4.50	4.90	3.75
Miscellaneous Profits	.059	.063	.088	.095	.081	.091	.150	.124	.130	.40	.23	.22
Total	3.449	4.256	3.522	4.066	4.433	3.552	4.571	4.884	3.799	4.90	5.13	3.97
Profit or Loss	± .023	± .050	± .044	± .017	± .250	± .057	± .063	± .113	± .016	± .15	± .65	± .19
Value Received per net ton of coal sold	3.405	4.294	3.513	4.170	4.445	3.518	4.411	4.829	3.690	4.56	5.02	3.88

Source: Data supplied by the Office of the Coal Controller, Ottawa.

Operating Costs and Revenues per net ton of Marketable coal Produced in New Brunswick, 1933-1943.

Year	Expenditures					Revenues					Net Profit or Loss						
	Stores	Insurance & Royalties	Rent & Workmen's Compensation	Administration	Depletion	Miscellaneous	Distribution	Total cost sold	Other Revenues & Credits								
1933	1.06	.26	.06	.05	.12	.23	.04	.13	.08	.12	3.18	.18	3.36	3.33	.17	3.50	±.14
1934	2.06	.34	.07	.04	.11	.26	.04	.14	.08	.06	3.33	.11	3.44	3.30	.17	3.47	±.03
1935	2.15	.35	.07	.03	.13	.27	.04	.14	.08	.03	3.42	.12	3.54	3.28	.15	3.43	- .11
1936	2.01	.34	.09	.04	.14	.24	.01	.20	.07	.04	3.30	.10	3.41	3.23	.15	3.38	- .02
1937	2.10	.39	.09	.05	.13	.25	.01	.16	.08	.03	3.42	.10	3.52	3.32	.11	3.42	- .09
1938	2.20	.40	.11	.04	.14	.29	.01	.12	.07	.05	3.57	.11	3.68	3.39	.13	3.52	- .16
1939	2.03	.42	.08	.04	.12	.23	.02	.16	.08	.03	3.32	.11	3.43	3.35	.10	3.45	±.02
1940	2.36	.38	.09	.08	.12	.21	.06	.13	.08	.05	3.68	.11	3.79	3.68	.13	3.81	±.02
1941	2.63	.38	.11	.07	.13	.23	.01	.15	.10	.04	3.97	.12	4.08	3.91	.16	4.07	- .02
1942	2.85	.36	.10	.19	.10	.29	.02	.16	.11	.05	4.35	.16	4.51	4.36	.21	4.57	±.06
1943	3.30	.39	.12	.07	.12	.34	.04	.24	.09	.09	4.92	.13	5.05	4.42	.48	4.90	- .16
% Change																	
1933-43	±68%	±50%	±100%	±40%	0	±8%	0	±85%	±13%	-25%	±54%	-28%	±50%	±33%	-42%	±40%	-
% change																	
1939-43	±63%	-7%	±50%	±75%	0	±43%	100%	±50%	±13%	±20%	±48%	±18%	±47%	±32%	±38%	±42%	-

Source: Figures supplied by the office of the Coal Controller, Ottawa.

Note: Due to dropping a decimal place, there is a difference of 1 cent in the component figures for some years.
 The Total cost and revenue figures, and profit and loss figures are as provided by the Coal Controller.

Shipments of Coal in Short Tons from New Brunswick Mines, by Grades and Destination
1938 - 1943

Destination	1938				1939				% of Total					
	Stripp- ing Coal	Run-of -mine	Lump	Nut and other Grades	Slack	Total	% of Total	Stripp- ing coal		Run-of -mine	Lump	Nut and Other Grades	Slack	Total
New Brunswick	14,647	61,106	17,568	3,864	47,311	144,586	43.3	21,709	87,273	13,827	5,525	78,199	206,623	44.7
Nova Scotia	--	--	126	--	--	126	a.	--	--	98	--	--	98	a
Prince Edward Island	--	121	1,171	40	--	1,332	0.4	--	90	996	49	142	1,227	0.3
Quebec	16,305	12,156	957	134	244	29,796	8.9	30,299	14,668	2,495	342	776	48,580	10.5
Ontario	284	--	--	--	--	284	0.1	498	--	--	--	295	793	0.2
United States	--	3,711	1,492	--	13,634	18,837	5.6	110	483	1,054	32	23,753	25,432	5.5
Canadian Railroads	--	30,603	103,656	549	3,713	138,611	41.5	--	24,250	148,082	1,143	4,446	178,830	38.7
Ships' Bunkers	--	--	385	107	--	582	0.2	--	--	495	--	--	495	0.1
Total	31,236	107,877	125,355	4,784	64,002	334,154	100.0	52,706	126,773	167,047	7,091	107,611	462,128	100.0

Compiled from Coal Statistics for Canada, 1938 - 1942, and from data provided by the Dominion Bureau of Statistics.

a. Less than 1/10 of 1 per cent.

TABLE NO. 15 (continued)

Shipments of Coal in Short Tons from New Brunswick Mines, by Grades and Destination
1938 - 1943

Destination	1940					1941								
	Stripp- ing coal	Run-of -mine	Lump	Nut and other Grades	Slack	Total	% of Total Coal	Stripp- ing Coal	Run-of -mine	Lump	Nut and other Grades	Slack	Total	% of Total
New Brunswick	52,112	88,005	25,872	3,371	81,952	251,312	47.0	64,050	99,006	19,762	2,620	74,392	260,730	50.9
Nova Scotia	--	9-	232	--	--	232	a-	---	--	200	--	--	200	a
Prince Edward Island	--	59	695	--	--	754	0.1	327	--	787	--	--	1,114	0.2
Quebec	41,552	8,481	1,063	874	875	53,745	10.1	27,614	7,749	1,360	1,116	1,911	39,750	7.8
Ontario	1,360	37	47	--	87	1,531	0.3	98	--	111	--	--	209	a
United States	--	4,468	672	--	21,046	26,186	4.9	--	10,100	264	--	27,318	37,682	7.4
Canadian Railroads	2,560	18,028	178,792	1,042	117	200,539	37.5	105	15,194	156,610	--	244	172,153	33.6
Ships' Bunkers	--	--	399	--	-	399	0.1	96	--	243	--	--	339	0.1
Total	77,584	119,078	208,672	5,287	104,077	534,698	100.0	92,290	132,949	170,337	3,736	103,865	512,177	100.0

Compiled from Coal Statistics for Canada, 1938 - 1942, and from data provided by the Dominion Bureau of Statistics.

a. Less than 1/10 of 1 per cent.

TABLE NO. 15 (concluded)

Shipments of Coal in Short Tons from New Brunswick Mines, by Grades and Destination
1938 - 1943

Destination	1942					1943								
	Stripp- ing Coal	Run-of -mine	Lump	Nut and other Grades	Slack	Total	% of Total	Strip- ing Coal	Run-of -mine	Lump	Nut and other Grades	Slack	Total	% of Total
New Brunswick	25,242	138,782	12,709	1,877	73,070	251,700	59.0	13,691	158,024	8,006	3,140	60,649	223,510	61.4
Nova Scotia	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Prince Edward Island	--	--	--	--	--	--	--	92	--	126	--	--	218	0.1
Quebec	--	3,921	917	250	1,296	6,384	1.5	--	5,142	245	--	527	5,914	1.6
Ontario	--	--	110	--	--	110	a	--	--	--	--	--	--	--
United States	--	4,393	548	--	24,934	29,875	7.0	1,933	5,074	562	--	22,158	29,727	8.2
Canadian Railroads	4,094	15,231	119,106	160	216	138,807	32.5	10,484	3,490	90,514	--	--	104,488	28.7
Ships' Bunkers	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	29,236	162,327	133,390	2,287	99,536	426,876	100.0	26,200	151,730	99,453	3,140	83,334	363,857	100.0

Compiled from Coal Statistics for Canada, 1938 - 1942, and from data provided by the Dominion Bureau of Statistics.

TABLE NO. 16

Tonnage and Cost of Canadian Coal Moved
Under Assisted Rates, by Calendar
Years, 1928 - 1943.

Year	New Brunswick		Nova Scotia		Canada	
	Tons	Subvention	Tons	Subvention	Tons	Subvention
1928	120	210	113,905	65,600	146,126	257,134
1929	231	330	304,276	205,270	341,622	418,737
1930	56	70	372,029	214,720	480,192	472,901
1931	239	162	401,597	225,137	732,916	613,524
1932	1,185	896	710,449	545,944	1149,247	1003,106
1933	1,163	981	1384,268	1280,223	1855,716	1735,407
1934	10,196	8,609	1748004	1687,451	2324,112	2238,103
1935	14,325	10,544	1588,302	1489,412	2182,477	2058,588
1936	20,889	13,314	1677,096	1572,780	2552,034	2209,735
1937	41,083	32,363	1908,821	1785,792	2637,345	2449,538
1938	33,505	23,456	1377,115	1253,313	2030,536	1851,292
1939	54,165	45,664	2420,694	2988,404	3403,581	4092,595
1940	59,224	42,586	1940,571	2643,367	3008,290	4315,590
1941	43,783	31,226	2015,829	2188,365	3318,968	4489,229
1942	6,627	5,202	1655,264	2710,438	2698,391	4420,380
1943	5,268	4,293	803,892	2310,513	1091,887	2533,084
Total	290,849	221,706	20422,112	23166,729	29735,440	35158,597

Source: Data provided by the Coal Controller's Office, Ottawa.

TABLE NO. 17

Total and Domestic Sales of Five Leading
New Brunswick Coal Operators, 1938 - 1944
(Short Tons)

Year	Domestic and Institutional Sales	% of Total	Total Sales
1938	15,259	7.3	202,966
1939	15,401	4.7	319,298
1940	19,660	5.4	367,687
1941	23,911	6.7	356,539
1942	20,099	6.2	322,681
1943	12,496	4.3	275,675
1944	10,061	4.0	251,701

TABLE NO. 18

Principal New Brunswick Markets for Coal
Sold by Six Leading New Brunswick Operators, 1938-1944,
(Short Tons Sold)

Destination	1938	1939	1940	1941	1942	1943	1944
Bathurst Spur	5,472	20,676	20,690	24,534	24,511	11,087	19,028
Chipman	3,000	3,081	3,700	1,000	1,000	--	1,000
Dalhousie	21,046	78,331	74,661	67,037	62,738	70,513	52,924
Edmundston	15,183	20,137	15,412	16,073	27,241	33,230	30,686
Fredericton	2,760	2,809	2,273	1,978	4,583	2,514	2,538
Marysville	6,081	4,095	6,511	3,360	6,200	5,650	6,390
Moncton	200	200	300	2,882	3,939	--	--
Saint John- Fairville	15,657	14,495	17,295	14,829	11,037	11,649	8,598
Power Commission	16,686	23,000	32,227	30,308	31,292	31,745	48,882
C. N. R.	83,291	110,778	145,196	125,943	97,527	68,789	46,994
C. P. R.	22,891	32,973	26,499	25,455	27,427	20,818	19,559
Total	192,269	310,575	344,764	313,399	297,495	255,995	236,599
Total All N.B. Sales	230,876	338,103	391,751	333,513	303,120	289,506	260,701

Summary of Coal Production, Exports, Imports, Inter-provincial Shipments
and Coal Available for Consumption in New Brunswick, 1937 - 1942

	1937	1938	1939	1940	1941	1942
N. B. Production	364,714	342,238	468,421	547,064	523,344	435,203
Received from other provinces	627,725	534,549	579,619	749,290	1,102,524	1,178,448
Imported from:						
U. S. A.	34,120	24,364	39,504	29,791	51,616	34,579
Great Britain	87,213	73,348	65,249	77,179	53,250	58,075
Other Countries	4,927 ¹	--	--	--	--	356 ²
Total Imports	126,260	97,712	104,753	107,150	104,866	93,010
Shipped to other provinces	44,131	31,538	50,748	56,262	41,273	6,494
Exported	84,942	79,665	110,581	109,797	133,838	102,065
Total available for consumption	989,626	863,296	991,464	1,237,445	1,555,623	1,598,082
Sales of Minto coal in N. B.	305,715	283,197	385,453	451,851	432,883	390,507
Ratio Minto sales to amount consumed	30.9%	32.8%	38.8%	36.5%	27.8%	24.5%
Ratio Minto production to amount consumed	36.8%	39.6%	47.2%	44.2%	33.6%	27.2%

Compiled from Coal Statistics for Canada, 1937 - 1942.

1. Germany
2. British India.

Classification of Coal Received in New Brunswick from Other Provinces and Countries, 1937 - 1942.

	1937	1938	1939	1940	1941	1942
Bituminous						
Nova Scotia ¹	627,725	534,549	579,619	749,290	1,102,524	1,178,448
United Kingdom	14,862	20,251	14,987	11,715	9,207	7,995
United States	13,768	8,001	13,957	8,337	32,462	2,352
Total Bituminous	656,355	562,801	608,563	769,342	1,144,193	1,189,151 ³
Anthracite						
United Kingdom	72,351	53,097	50,262	65,464	44,043	50,080
United States	20,352	16,363	25,547	21,634	19,154	32,227
Total Anthracite	97,630 ²	69,460	75,809	87,098	63,197	82,307
Total, All Coals Received from outside the Province	749,058	632,261	684,372	856,440	1,207,390	1,271,458

Compiled from Coal Statistics for Canada, 1937 - 1942.

1. Of the coal received from Nova Scotia, the following amounts were for railways in New Brunswick:

1937	.....	105,420
1938	.....	110,303
1939	.....	104,215
1940	.....	157,626
1941	.....	334,547
1942	.....	336,326

2. Including 4,927 tons imported from Germany.

3. Including 356 tons imported from British India.

(a) Combination mileage via Chipman.

APPENDIX "B"

LOCAL FREIGHT AND SHUNTING CHARGES
WITHIN THE MINTO-CHIPMAN COAL FIELD

<u>Mining Section Point of Origin</u>	<u>Railway Main Line Destination</u>	<u>Freight Rate Per Ton</u>
North Minto	C.N.R. Hardwood Ridge	10¢
South Minto	C.N.R. Chipman	30¢
Newcastle Bridge	C.N.R. Chipman	30¢
Chipman	C.N.R. Chipman	10¢
Coal Creek	C.N.R. Chipman	30¢
North Minto	C.P.R. Minto	5¢
South Minto	C.P.R. Minto	5¢
Newcastle Bridge	C.P.R. Minto	5¢
Chipman	C.P.R. Chipman	5¢
Coal Creek	C.P.R. Coal Creek	-
North Minto	Power Plant	30¢
South Minto	Power Plant	30¢
Newcastle Bridge	Power Plant	30¢
Chipman	Power Plant	65¢
Coal Creek	Power Plant	65¢

Rule 7 of the N. B. C. & Ry. Tariff No. 6, C. T. C. 194
reads as follows:

"Where railways perform switching service on private or industrial sidings beyond an area of 1,000 feet from the connecting switch, a charge of not less than \$2.00 per car over and above the rate from the station will be assessed. For distances over two miles a charge of 50¢ per mile or part thereof, in addition to the \$2.00 rate will be charged."

ROYAL COMMISSION ON COAL

Fredericton, N. B., Saturday, February 17th, 1945.

VOLUME XVIII

WITNESSES:

Dr. H. J. Rowley.....	Pages 1433 - 1506
R. J. Taylor.....	" 1507 - 1512
Adam Andrews.....	" 1512 - 1517
Frank Guss.....	" 1517 - 1524
A. D. King.....	" 1525 - 1530
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- - - - -



LIST OF EXHIBITS

- No. 78 - Map, Plate 42-18, showing Mining
Rights in the Minto field,
Date 17/2/45.....page 1450
- No. 79 - Map, Plate of Grand Lake Coal
Basin, Date 17/2/45.....page 1471
- No. 80 - Submission of Rothwell Mine
Workers Union, Rothwell,
Queens County, N.B., Date
17/2/45.....page 1507
- No. 81 - Submission by Sub-district
#7, United Mine Workers of
Amherst, Date 17/2/45...page 1517

FREDERICTON, N. B., SATURDAY, FEBRUARY 17th, 1945 - 9:30 A.M.DR. H. J. ROWLEY takes the stand and continues brief, Ex. 75

Coal Reserves The coal reserves listed by areas in the following table are compiled by planimeter measurements of the areas shown on Plate 45-3 using wherever possible the "ton per acre yield" used by the operators. Final estimates of the reserves cannot be made without an elaborate drilling program to determine long reaches of boundary and the thickness of the seam in unexplored areas. The areas listed in the following table are believed to be conservative. Errors in total tonnage may be due to the figures used for "tons per acre". The reserves are listed as Probable Coal and Possible Coal.

Probable coal covers that proven by drilling and mining as well as adjacent areas where the projection of sub-surface contours assures coal with reasonable certainty. A large portion of the stated amount might well be listed as Proven Coal, but in some of the areas, operators are not agreed that the coal will ever pay to mine. This is particularly true of the deeper parts of the Midland and Chipman districts.

Possible coal covers areas where coal is known to exist but where data is not sufficient to outline the boundaries of probable coal.

Tabulated List of Coal Reserves ¹

District	Acres	Tons per Acre	Probable Coal (Tons)	Possible Coal (Tons)
Upper 18-Brook	690	2,000	-----	1,380,000
Lower 18-Brook	608	3,000	1,824,000	-----
Sheffield	446	2,500	1,115,000	-----
Lower Little River	78	2,300	-----	179,400
Upper Little River	378	2,300	869,400	-----
North Minto	761	3,000	2,283,000	-----
South Minto	2,411	2,500	6,027,500	-----
Midland	21,040	2,000	42,080,000	-----
Salmon River	73	2,000	-----	146,000
North Forks	400	2,000	-----	800,000
Chipman	5,917	2,000	11,834,000	-----
Chipman	3,152	2,000	-----	6,304,000
Coal Creek	1,721	2,000	3,442,000	-----
	37,675	29,600	69,474,900	8,809,400

Grand Total 78,284,300 tons.

1. Coal Reserves at the end of 1943. For locations of districts see Plate 45-3. (Exhibit 77).

Quality of Grand Lake Coal

The following descriptions of the coal are selected from publications of the Fuel Research Laboratories, Ottawa. The numbers in brackets are the official numbers of the reports.

(48). The Minto coals are well banded bituminous coals with a predominance of bright coal and an average quantity of fusain. There is an appreciable quantity of visible pyrite, ankerite, and some shale. The coals are cuboidal in shape with a fairly square fracture.

(181). Although Minto coals, when considered on the pure coal basis, are bituminous coal of somewhat higher rank than most of the coals in the Sydney, Nova Scotia, area, they are of much inferior grade. Generally speaking the ash and sulphur contents are very high, the ash of run-of-mine coal ranging from about 15.0% to 20% and the sulphur varying between about 5.5% and 8.5%. In addition the moisture content of the coal as mined is comparatively high. The coal is highly fractured and thus breaks down readily during mining, preparation, loading and shipping, resulting in about 66% of $1\frac{1}{2}$ inch slack. The large proportion of fines together with the high sulphur make a coal which is rather difficult to store without danger of spontaneous combustion even when lump coal screened on a $\frac{3}{4}$ or $1\frac{1}{2}$ inch screen is prepared, unless special precautions and suitable methods for storage are employed.

The low grade of the coal and the attendant difficulty of storage allow coals like those from the relatively distant Sydney area to compete for and readily capture those industrial and domestic markets which by reason of proximity should be retained by New Brunswick coals. Unless the quality of the New Brunswick coal is appreciably improved by suitable methods of preparation, the available market is bound to decrease, especially when strong peace time competition is revived.

Classification of Coal by Rank

This modern classification has been adopted from

specifications of the American Society of Testing Materials, (A.S.T.M.). The principle is explained in "Coals of Alberta" published by the Research Council of Alberta in Report No. 38. Since the dry fixed carbon is less than 69%, the classification depends on the value of "Moist, mineral-free B.T.U." a value which is computed by the following formula where A is ash and S is sulphur:

$$\text{Moist mineral-free B.T.U.} = \frac{\text{B. T. U.}}{100 - (1.1 A + 0.1 S)} \times 100$$

The computed moist mineral-free B.T.U.'s of the Grant Lake coals and the classifications are shown in tables of analysis. All of the coals analyzed fall in Class II, Bituminous, Group 3, High Volatile A.

Commercial Grades

Grand Lake coal is marketed in four grades: run-of-mine, screened lump, slack and stripped. Screened lump is prepared from run-of-mine by screening and picking out refuse as it passes along picking belts. Slack is the balance of run-of-mine which passes through the screens. Hard varieties of strip coal yield screened lump and slack, but the softer varieties form a special grade which is sold as strip coal.

Proximate Analysis

Most of the published analysis of Grand Lake Coal have been made by the staff of the Fuel Testing Laboratories, Ottawa, and published in "Reports of Investigations - Carbonization Section". (R.I.C.S.). Tabulation of all analyses would fill several pages and the average results would not differ materially from those in Tables I, II, III, IV and V which accompany this brief. The figures in four of these tables are taken from R.I.C.S. No. 181, dated March 1943, Table I, taken from reports numbered in brackets is presented to show analyses of coal from some mines which were not operating in 1942.

The samples in No. 181 were collected by officials of the Fuel Testing Laboratories, in 1942. Fifty-five of them

came from 24 operations in the Minto district, and 9 of them from 4 operations in the Chipman district. Seven of the samples were collected from cars during their unloading and the remainder are samples of coal as it was being loaded for shipment at the mines. Special samples for moisture analysis were packed and shipped in sealed containers, and those for proximate analyses and physical tests were shipped in cotton bags.

Perhaps a word of explanation is justified at this point about three types of proximate analyses published on the coal. Proximate analyses are made of air-dried samples and show the percentages of moisture, ash, volatile matter and fixed carbon, totalling 100%. The amount of sulphur is determined separately. The moisture in the air-dried sample plus that lost in drying gives the total moisture in the sample, and analyses are calculated to the moisture "as received" basis, in which the percentages of the other components are lower. Determinations on air-dried samples calculated on a "dry basis" do not show moisture, but a correspondingly high percentage of other components. Analyses in this brief show the moisture content of air-dried samples, and average analyses on a basis of moisture as received, because R.I.C.S. No. 181 states that those percentages "may be used as a reliable guide in evaluating coals".

A summary of average chemical analyses of the various grades of coal in the Grand Lake area is shown in the following table, taken from R.I.C.S. No. 181. The values are recalculated on the basis of an average "as received moisture content", and may be used as a reliable guide in comparing the different grades.

Comparative Analyses of the Main Grades of Coal

<u>Adjusted for average "as received" moisture</u>						
		Normal Run-of-Mine	Screened Lump	Slack <u>1$\frac{1}{4}$"</u>	<u>3$\frac{3}{4}$"</u>	Strip Soft
Moisture	%	4.3	2.9	6.0	6.0	15.1
Ash	%	18.5	18.4	21.0	22.7	4.8
Volatile matter	%	29.2	29.8	28.1	27.3	27.9
Fixed carbon	%	48.0	48.9	44.9	44.0	52.2
Sulphur	%	8.1	7.8	7.7	6.9	1.8
Calorific value B.T.U.		11,430	11,755	10,795	10,580	11,810
Fusion point ash °F		2040	2040	2035	2040	2350

I think I might comment on the Table and refer you to the difference in composition of the Strip coal as compared with the average analyses of the four other coals. High moisture, low ash and low sulphur of the strip coal.

R. ROWLEY continues brief

The following comments on analyses are summarized from the same report. It is interesting to note that there is not a very great variation in the average chemical analyses of the run-of-mine, screened lump and slack coals. The major differences are higher moisture and the higher ash in the slacks. The soft strip coal is in a grade of its own. It is won mainly from areas where the shallow overburden consists chiefly of unconsolidated boulder clay, sand and gravel which readily admit surface water and its dissolved oxygen. The oxygenated waters, acting on the coal during a long period of years have substantially changed pyrite to soluble sulphates which have been leached out of the coal, leaving it soft and mushy, and this sponge-like mass holds large quantities of water. The leaching process has reduced the iron and sulphur, leaving an ash which is more refractory than that of normal coal. Where the overburden is heavier and composed largely of consolidated rocks, the coal is harder, and may be screened and sold as screened lump and slack.

Coal Cleaning Possibilities

Present cleaning efforts are confined to hand picking the impurities from screened lump coal as it passes along picking belts on the way to railway cars, and the slack coal is sold in its natural state. Tests on cleaning screened and slack coal by mechanical methods have been carried on by the Fuel Testing Laboratories, Ottawa, for upwards of 30 years, and a mass of valuable information is recorded in various publications, more particularly in the R.I.C.S. series. In number 48 of this series issued in 1935 the following statement is made: "The coals appear difficult to wash, and in most cases the reduction in impurities obtained by washing is insufficient to warrant the installation of expensive cleaning or washing plants, except under such conditions as have been outlined."

BY MR. FRAWLEY - This is referring to Minto coal?

A. Yes.

DR. ROWLEY continues brief

In publication No. 195, dated December 1944, we find the statement: "and it has been concluded that, although this coal is not easy to wash, standard equipment may be employed to effect a separation with the resultant production of a relatively clean product." In a personal communication dated February 9th of the present year, the Chief of the Fuel Division states that report No. 195 is based on more recent extensive investigations and the conclusions nullify the general statement in the earlier report.

Some of the main conclusions in Chapter VII of No. 195 are briefly summarized in the following paragraphs:

(1). Lump coal retained on a $1\frac{1}{2}$ inch screen contains an average of about 14.5% ash, whereas slack passing a $1\frac{1}{2}$ inch screen contains approximately 17.5% ash and 7% sulphur.

(2) Washing lump coal reduces the ash to 13.0% with a refuse loss of 11%.

(3) Washing slack coal reduces the ash to approximately 10.5% and sulphur to 5.5% with a refuse loss of about 16.5%.

(4) The method of washing slack coal may be varied from (3) to produce: (a) Clean coal containing a minimum of 8% ash. (b) Middlings containing about 17% ash, and (c) Refuse.

BY THE CHAIRMAN - It would seem then that they do not get the ash out of it, that it stays in some portion of the coal. The main coal contains "Middlings containing about 17% ash".

BY MR. FRAWLEY - 8% is about the best they can do.

Q. What is the normal?

A. Lump coal with 14.5% ash, and slack with 17.5% ash.

Q. The lump coal is the coal they get after screening?

A. Detained on a 1-1/2 inch screen.

Q. It is reduced in ash, but the middlings?

BY DR. WRIGHT - The lump coal is treated as a unit sir. The reduction in washing lump is only from 14.5% to 13% ash. He considers that is not economical, but he takes the slack and that is the one he gets improvement on.

Q. Is it slack that he is talking about in sub-section (4)?

A. Yes sir.

BY MR. TAYLOR - I would like to ask how they arrive at that determination on lump coal, that they can reduce the ash in lump coal 1 1/2%, because in your tabulation of the various coals in the same place the determination still comes within 1 1/2%. We question very much if any change can be made in the quality of lump coal by washing.

BY DR. Rowley - "Washing tests have conclusively indicated that the lump sizes are difficult to clean, it being possible on the average to reduce the ash content to only about 13.0% with a refuse loss of approximately 11%." That is a statement by E. Swartzman.

BY MR. FRAWLEY - From No. 195 Report of Investigations Carbonization Section, of the Fuel Reports Laboratories at Ottawa, and when the Ottawa people appear before us, no doubt Mr. Swartzman will appear.

BY MR. TAYLOR - Do I understand that Mr. Swartzman will put that in and that it will be part of the record of this

Commission?

BY MR. FRAWLEY - That is my plan at the moment.

BY MR. TAYLOR - We would like at that time, it may be awkward, but it seems a peculiar thing that these reports are published on the Minto coal basin on the preparation of coal, and that everyone seems to know about them except the operators. We have not had time to study this report; it has been in the hands of some of them this last day or two. I have had a chance to read a borrowed copy casually. It is a report made by an official in Ottawa, I don't know his standing, but he arrives at a lot of conclusions, and we admit that technicians can do practically anything with coal, but we would like to have an opportunity at the time that report is put in, to have some time to go over it and criticize it, or point out the economics of it. He starts out with a premise, Minto coal mined at \$3.50 a ton, whereas it is costing nearly double that, and we are going to put a coke on the market that will compete with Dominion coke at \$1.00 a ton less.

BY THE CHAIRMAN - You will get every opportunity you reasonably want.

BY MR. TAYLOR - Do I understand that that report is to be read into the record of this Commission?

BY THE CHAIRMAN - Dr. Swartzman will be called before the Commission, and you want the opportunity of what?

A. Examining him.

BY MR. FRAWLEY - I will see that Mr. Taylor's Association and the Government will have full notice of Dr. Swartzman's appearance.

BY COMMISSIONER MORRISON

Q. You are a member of the Canadian Coal Producers' Association, are you not?

A. I am an associate member. Our Association is a member.

Q. Well I am sure that your efficient officer at Ottawa will keep you in touch with what is going on through your own organization.

BY THE CHAIRMAN - You will be given every opportunity.

BY MR. FRAWLEY - This is certainly the latest report on the beneficiation of Minto coals.

DR. ROWLEY continues brief

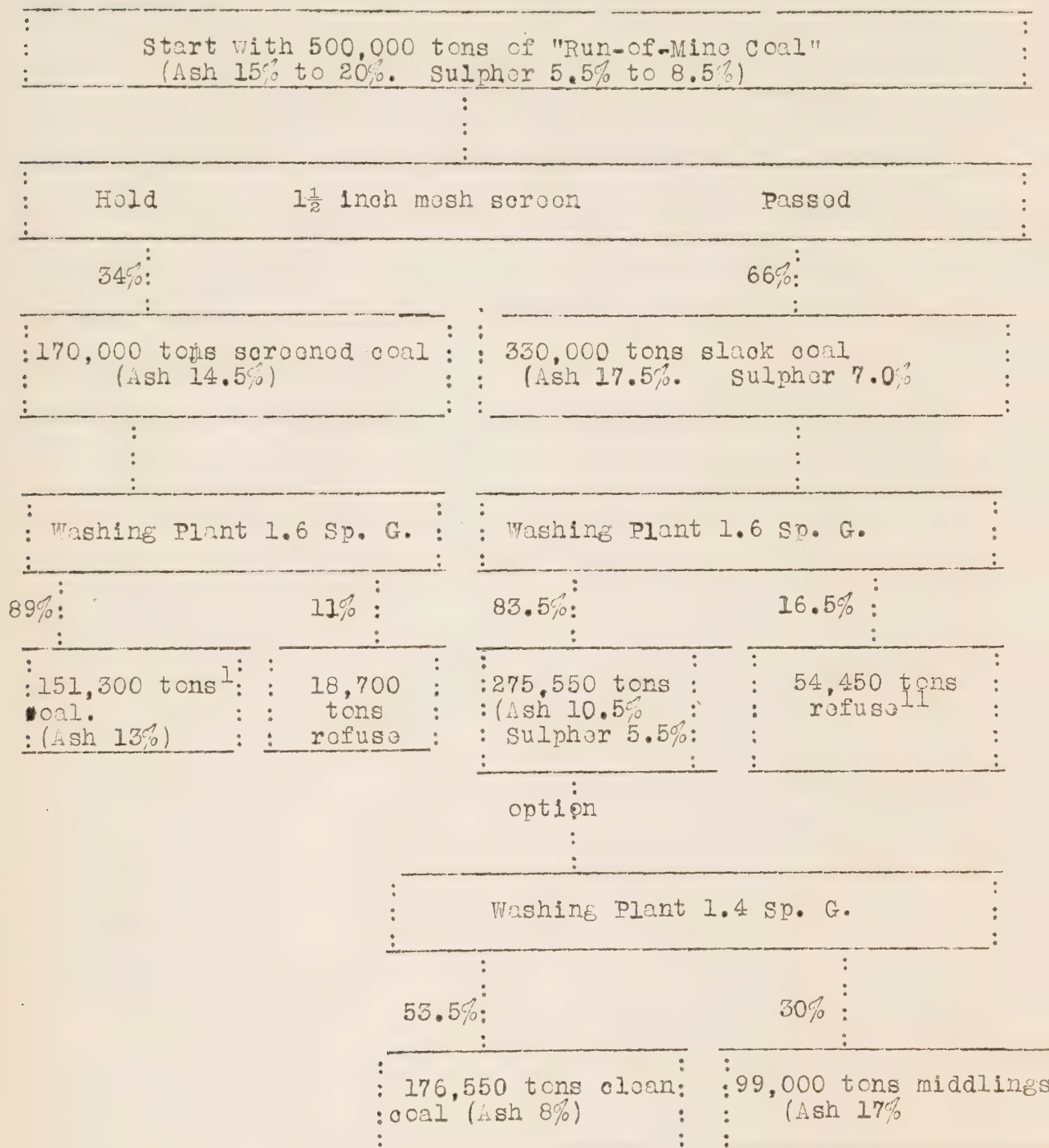
(5) Conclusions. (a) Washing of lump coal is not warranted. (b) Washing of slack coal is warranted, and the selection of process (3) or (4), depends on available market for the cleaned fractions.

The following list of products estimated as the yield of 500,000 tons of Minto coal is slightly revised after R.I.C.S. No. 195, p. 13.

Product	Quantity	Suggested Uses
Screened (lump) coal	170,000	Railway
Clean coal	176,550	Industrial and coke
Middlings	99,000	Power Plant
Refuse	54,450	No. value

Total coal mined	500,000	
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A diagrammatic flow sheet of the washing process and the estimated products is given on the following page.

Summary Flow Sheet of Washing Minto Coal.

1. Washing lump coal not warranted. Could be cleaned by picking.

11. Assuming a plant efficiency of 85% the refuse would increase to 20% of the slack (66,000 tons) which amounts to about 13.2% of "Run-of-Mine".

BY MR. FRAWLEY - Is this a flow sheet that has been adopted from the Swartzman report?

A. Yes.

1. The first part of the report

2. The second part of the report

3. The third part of the report

4. The fourth part of the report

5. The fifth part of the report

6. The sixth part of the report

7. The seventh part of the report

8. The eighth part of the report

9. The ninth part of the report

10. The tenth part of the report

11. The eleventh part of the report

12. The twelfth part of the report

13. The thirteenth part of the report

14. The fourteenth part of the report

15. The fifteenth part of the report

16. The sixteenth part of the report

17. The seventeenth part of the report

18. The eighteenth part of the report

19. The nineteenth part of the report

DR. ROWLEY continues briefCoking Possibilities

There is no coking plant in the Grand Lake field, but many laboratory and some commercial tests on coking possibilities have been carried out by or under the supervision of the Fuel Testing Laboratories, Ottawa. Details of these tests are set forth in several Reports of Investigations - Carbonization Section, and the following excerpts will serve to give an idea of the mechanical possibilities.

HIGH TEMPERATURE CARBONIZATION

In 1924 a carload of unwashed coal was treated in a commercial by-products oven. In appearance the coke was surprisingly good, but the ash and sulphur were too high for domestic trade in most of Canada.

Low Temperature Carbonization

The next experiment in carbonization was made in a 600-pound coke oven in the Fuel Testing Laboratories. The coal was air-cleaned, then blended with coke and treated at flue temperatures of 1427°F. The tests are reported as definitely satisfactory insofar as the quality of coke is concerned, and further experimental work was recommended.

Curran-Knowles Process

In 1940 a commercial test was made by the Curran-Knowles process, using two carloads of run-of-mine coal, which was crushed, screened, and air-cleaned in the Fuel Testing Laboratories. Information obtained indicates the suitability of Grand Lake coal for the manufacture of domestic coke.

By-products obtained by earlier experiments are not discussed in this brief, but we submit the following remarks on by-products from the Curran-Knowles process.

Marketable products are coke, tar and gas. The tar is of particular value to the wood preserving industry, and due to its high creosote content may be substituted for 70/30 creosote which is a mixture of 70% distilled creosote and 30% by-products tar. The gas produced in excess of requirements for heating the retorts rates 500 B.T.U. per cubic foot.

It has a high sulphur content but it may be used for steam raising without de-sulphurization. The yield of marketable products is summarized as follows:-

Yields per ton of coal charged:

Coke Yield, (dry basis).....%	77.4
Breeze.....%	6.4
Coke less breeze.....%	70.7
Tar Yield (estimated) Imperial gallons	10
Surplus gas..... cubic feet	4,000

From the above figures an economic balance may be prepared, which should be based on marketing conditions in the area to be served and the value of the clean coal delivered to the plant.

BY MR. FRAWLEY - Before you go on to something different, do you know to what extent the possibility of developing the by-product plant using Minto coke to make coal and tar, has progressed?

A. I think it is still in the discussion stage. It is an item which the Department of Lands and Mines is interested in, and also the Resources Development Board, from the standpoint of study only.

Q. Do you know of any interests in New Brunswick that have been considering this question on a commercial basis?

A. Yes, I believe there is one.

Q. You are referring to Joseph A. Likely, Timber Merchants, of St. John?

A. Right.

Q. Do you know how far their investigations have progressed?

A. No. I do know that they have had interests in the Curren-Knowles process and I have sent data from the parent company

. You have had made available to you certain correspondence passing between the Likely Company and the people who would be interested in constructing such a plant?

. Yes.

Q. And you know that the Likely people have been in communication with people in Ontario?

A. Yes.

Q. Do you propose to follow the matter up from the standpoint of the New Brunswick Development Board?

A. Yes.

Q. To see how feasible the construction of such a plant would be?

A. Yes.

Q. The interest of the timber industry is that it may provide a cheaper creosote for creosoting timber of various kinds. At the present time the St. John operator would have to buy his creosote possibly from the Dominion plant at Sydney?

A. Or from Montreal.

Q. And the construction of a plant in either Minto or St. John would displace the creosote now being purchased from either Sydney or Montreal?

A. I expect it would, except for the fact that the Dominion Tar & Chemicals have a plant at Newcastle.

Q. But that is just a creosoting operation?

A. Yes.

Q. There is no manufacture of creosote there?

A. No.

Q. And it may be difficult to disturb that supply there?

A. I expect it would still be supplied by the Dominion Tar & Chemicals's own operations.

Q. With the option of course that they may prefer to buy it?

A. Yes.

Q. I think I should put something in the record. Any operation of this kind would put on the market coke, would it not?

A. Yes.

Q. And the purpose of that would be to displace American anthracite?

A. That is correct.

Q. Now you say you have seen the Swartzman Report?

A. Yes.

"I would like to call your attention to what Swartzman says on page 23 when he speaks about the quality of the coke, and I think the simplest thing to do would be to read a paragraph in the record and ask you to indicate your views: (reads)

"Quality of the Coke - Using the results obtained in the tests conducted with Minto coal in the Curren-Knowles plant at Owen Sound, Ont.¹ but correcting the values from a 10.8 ash coal to one containing 8% ash, the chemical analyses of the resultant stove size coke would be as follows on the basis of an assumed moisture content of 3%, in comparison to a stove size anthracite and "Doseco" coke.

	<u>Minto Coke</u>	<u>American Anthracite</u>	<u>Doseco Coke</u>
Moisture.....%	3.0	2.9	3.0 (a)
Ash	9.7	9.5	8.9
Volatile matter.....%	1.6	5.1	1.0
Fixed carbon	85.7	82.5	87.1
Sulphur.....%	4.5	0.9	1.8
Calorific value B.T.U./lb.	12535	13190	12350
Soft. Temp. of ash..."F.	1900	2850	1990

The above comparative analyses indicates that the Minto coke would be as good from every standpoint, except sulphur, as the Doseco coke. Both have an ash which fuses at a low temperature, resulting in the production of clinker on combustion. In comparison to the American anthracite, the analyses above being that of an average good product, the Minto coke would be somewhat lower in calorific value, and much lower in ash softening temperature, but on the whole a product that would find no difficulty in competing easily on the market."

That has, of course, to be kept in mind, assuming that Swartzman is correct, when you are thinking of the coke which would be a necessary product of this operation.

BY MR. TAYLOR - I see where the Swartzman Report is being read into the record at this time. I would like to know if there has been any study in that report of the market possibilities

of this coke?

DR. ROWLEY - No, there has been none apart from what is mentioned, in so far as New Brunswick is concerned.

BY MR. TAYLOR - From what Mr. Frawley just read there, it seems that this product - I don't know exactly but I know the city of Fredericton is well supplied with coke at the present time. The consumption is about 700 tons a year.

BY MR. FRAWLEY - It is not the most satisfactory way in which to get Dr. Swartzman's views before the Commission. Here we have Dr. Rowley, and if any such plant is going to go ahead it has to be with the full consent and co-operation of Dr. Rowley. Mr. Taylor is at a disadvantage and I don't expect him to intolligently comment now on what Dr. Swartzman says. When Dr. Swartzman comes before the Commission it will be another matter.

BY THE CHAIRMAN - I think, on the other hand, it is very good news to Mr. Taylor and his associates to have this in evidence. So far as putting in the report, we are not accepting that as final; but I think it is well for you people to know about it.

BY MR. TAYLOR - I think it is well because a lot of things have developed here today that those in the coal business know nothing about. It seems peculiar that all these plans have gone on and the main source of supply does not know anything about it.

BY COMMISSIONER McLAURIN - You don't know where the money will come into the barrel from, Mr. Frawley?

BY MR. FRAWLEY - Mr. Likely is very much interested and they are certainly people of means. The reason I introduced it was to have it said in the presence of Dr. Rowley, because if it goes ahead it will probably have to go ahead with one of Dr. Rowley's re-construction schemes.

BY DR. ROWLEY - All I can say is that this has been published and we are aware of the fact, and we wish to make indication of that in the submission.

DR. ROWLEY continues brief.

The Mining Act. In the Province of New Brunswick coal is reserved to the Crown. The administration of The Mining

Act is devolved upon and attached to the Department of Lands and Mines, and the Minister is charged with the duty of carrying out and enforcing its provisions. The Inspector of Mines, under the direction of the Minister, has charge of the carrying out of the Mining Act. There is a Deputy-Inspector for the Minto-Chipman District. It is the duty of the Recorder "to keep records of all licenses, claims, leases, or of any things or matters pertaining to the administration of The Mining Act". The Inspector of Mines is also the Recorder.

There are three classes of rights under the Act; Prospecting Licenses, Mining Licenses, and Mining Leases. Under authority of a Prospecting License up to 40 acre claims may be staked. Claims may be renewed for the year following the year in which they were staked, and for that year only, on reporting work to the extent of 25 man days per claim. Mining Claims are designed for prospecting or exploration. At any time after the above mentioned work has been performed and certain other requirements, such as filing survey and bond form, have been fulfilled, application may be made for Mining Licenses, each mining license having the bounds of the original mining claim. The rental is ten dollars per year for each forty acre block and the mining licenses may be renewed from year to year upon proof that labour to the extent of 25 man days has been performed for each area of forty acres. It should be mentioned that in both the case of mining claims or mining licenses all labour may be performed on one or more of a group of mining claims or licenses, and the mining rights may be renewed if satisfactory explanation is shown for non-performance of work. The holder of mining licenses on which mining has been carried on for a period of at least six months may apply for a mining lease covering the area of the mining licenses. The rental is at the rate of \$10.00 a year for each forty acres or fraction thereof. Royalty paid the Crown will be a credit on the rental after the initial year's rental has been paid; thus where royalty exceeds the amount of rental then there is no rental due. The lessee

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Dr. H. J. Rawley

is required to pay rent or royalty when due, to work his mine in a "good and workmanlike manner" and to conform to the provisions of The Mining Act.

BY THE CHAIRMAN - Are these "Probable" or "Possible" reserves are they taken up by claims?

MR. WRIGHT - I think that can be shown by referring to this map of mining rights and comparing that.

EXHIBIT 78 - Plate 42-18 Map of Mining Rights
Date 17/2/45....

BY MR. FRAWLEY - The Chairman wants to know if the areas referred to in your brief as "Probable" and "Possible" areas have been covered by one or other of these various kinds of rights, which are?

A. Mining claims, Mining Licenses or Mining Leases.

BY THE CHAIRMAN - I would ask first about Leases?

A. No, all areas have not been covered.

Q. What about Mining Rights?

A. Certain areas are not under any mining rights. There are areas here in this Exhibit 77, marked in red are the areas stripped, and marked in brown are the areas mined, and marked in blue are the Probable areas, and in green are the Possible areas. From that you can see there are areas in the vicinity of Chipman and Coal Creek marked as Possible coal, not under any mining rights. West of the road from Chipman to Coal Creek are some marked "Possible" which are not under any mining rights. And areas north of Salmon Bay are marked "Possible" and are not under mining rights.

BY MR. FRAWLEY - Will an examination of Exhibit 77 show what are under Mining Claims, Mining Licenses and Mining Leases?

A. I would say that Exhibit 77, used with Exhibit 78, would show it better, because 78 shows as of 1944 all mining rights held in the field.

Q. Explain Exhibit 78.

A. It is a map showing mining rights, and for convenience of

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Dr. H. J. Rowley

demonstration only, I have colored areas held by one lessee the same color. That is buff is Lease 172 Minto Coal Company. In green, Lease 162, Avon Coal Company; in blue the Miramichi Lumber Company, Lease 171 and also 209, in brown, Welton and Henderson, Ltd., No. 179. Because of lack of colors I was not able to show them all.

Q. But close examination of Exhibit No. 78 will show what areas are held under Mining Claims, under Mining Rights, and under Mining Leases?

A. Yes, for 1944.

Q. I suppose at one time in the past all of these areas were held under rights?

A. Not necessarily. The claims may vary from year to year, as a grub stake in 1944 may be dropped in 1945, but there are areas in here that in the last five years have not been held. But I can't go back much more.

BY MR. TAYLOR - Is it not a fact that at one time they were all held under various licenses?

A. I have no record beyond the last five years, but from my examination of old records.

Q. If you go back say 20 years?

A. I could not say.

BY THE CHAIRMAN - Are any of the claims designated "possible" rights held by lease?

A. Yes, very definitely.

Q. And are a considerable number of "Probable" rights held by lease?

A. That is true.

Q. It will help us out in seeing whether possible or not, if they are held by lease and if they stand up to their obligations, it will help us to see whether they are Probable or Possible; and I suppose they have certain obligations?

A. Yes, work must be carried on on some part of the lease.

Q. What kind of work?

A. Mining.

Q. Prospecting mining?

A. A mine lease is subject to forfeiture if mining is not carried on.

Q. It is difficult to carry on if there is no coal. In those "Possible" leases what is the work that must be carried on? Digging holes?

A. It must be mining.

Q. What if there is no coal?

A. If there is no coal to be mined the lessee would forfeit his lease.

Q. If a man has a lease designated as you call it "Possible coal" for two or three years, he cannot mine it until he finds the coal, and you people have not said yet that there is definitely any coal in those Possible areas.

A. I do think that that could be clarified by stating that one lease might cover an area of actual coal and it might go to an area of "Probable" or "Possible" coal, and it might extend into an area where there is no coal.

Q. "Possible" coal, you don't know whether there is any coal or not.

A. What I mean, if the mining is in one spot..

Q. Would that hold the whole lease?

A. Yes.

BY COMMISSIONER MORRISON - The arrangement is fairly flexible?

A. In what respect?

Q. In respect to working on the lease?

A. I would not say. The Lessee is subject to forfeiture if mining is not carried on. In the case of licenses, work in the nature of drilling.

Q. But the Doctor has indicated that mining rights may be renewed if satisfactory explanation is shown for non-performance of work. If Mr. Taylor came to interview the Minister and made a good case on paper, the lease would be renewed for him despite the fact that he had not performed any work.

A. I think you will note that it should be mentioned in both

mining claims and licenses; that does not apply to leases. In times of war we have had to take into consideration the difficulty of obtaining satisfactory men for hand drilling, and if it could be shown that all the men in the employ of that lessee were engaged in mining, then we would take into consideration that fact and renew the lease. But if that went on over a period of years and no legitimate attempt was made, the mining rights would be forfeited.

Q. I notice one color there, the Minto Coal covers that area pretty well. I don't know who holds this color but if their mine was located at that far northerly corner and they were operating there, would that suffice so far as the government was concerned, for all the other area that they hold?

A. That is true sir, as long as that lease is held as one lease. If the Minto Company hold two leases, work then would have to be carried on on both of those leases. In this particular regard the work is carried on, a shaft is in one vicinity, and stripping operations and coal is being taken out in another vicinity. That does suffice for work on that lease.

DR. ROWLEY continued brief

Royalty on coal mined is 9 cents per short ton.

Coal used for domestic purposes by the workmen employed in and about the mine, and coal used in the mining operations is not subject to royalty.

Mining Licenses and Leases

In 1944 there were, in the Grand Lake Coal Basin, 68 mining licenses held by 16 licensees, and 39 mining leases held by 32 lessees. Of the total 48 licenses and leases, mining was carried on by 21.

Production

The producing licenses and leases in 1944 are shown as follows:

	<u>Production Short Tons</u>
In excess of 100 thousand short tons.....1	134,298
Between 100 and 50 thousand short tons.....-	----
Between 50 and 40 thousand short tons.....1	46,737
Between 40 and 25 thousand short tons.....2	65,136
Between 25 and 10 thousand short tons.....3	56,082
Between 10 and 5 thousand short tons.....2	13,305
Between 5 and 1 thousand short tons.....6	16,853
Below 1 thousand short tons.....6	<u>1,969</u>
21	334,380
Total licensees and leasees producing.....21	334,380
Production from Beersville.....	<u>123</u>
Total New Brunswick production fiscal year....	334,503

The maximum yearly production in New Brunswick was in 1941 when 532,449 tons were produced, employing 1,393 men. In 1944, 334,503 tons were produced, employing 934 men. Comparing 1944 with 1941 we find a 37.1 per cent reduction in coal production, and a 32.9 per cent reduction in number of employees.

The actual mining was carried on as follows:

Shafts..... 17
 Slopes..... 3 - two of which were very small operations
 Drifts..... 6 - very small operations
 Stripping operations.....11

Consumption

In 1942 New Brunswick mines produced 435,203 tons of bituminous coal, 1,189,151 tons were received from Nova Scotia, and 10,703 tons were imported. During the same year 102,085 tons were exported to Maine and 6,494 tons were shipped to Quebec. This left a Provincial consumption of 1,515,775 tons of bituminous coal. In 1942 New Brunswick imported 82,307 tons of anthracite; however, prior to the war the annual anthracite consumption was about 100,000 tons.

BY MR. TAYLOR - Mr. Chairman, I think in reading those figures, they might not be properly understood. If Dr. Rowley will read those figures over again - they don't agree with our figures, and the reason I believe, Mr. Rowley's figures cover coal imported into St. John and exported to Maine, and the use of anthracite would be something on the same basis, there is American coal imported into St. John and trans-shipped by rail to Maine. I think that is the explanation of those large shipments to Maine.

BY MR. FRAWLEY - Do you suggest that of the 102,085 tons exported to Maine, some of it may have come in from the United States:

A. Probably 75,000 or 80,000 tons either came in from the United States or Nova Scotia. The St. John people could tell you about that.

DR. ROWLEY continues brief

About 750,000 cords of wood are burned annually.

The use of gas is restricted to the Moncton, Hillsborough and St. John districts, where some 700,000 M. cu. ft. are consumed annually.

Conditions of Mining

Since the closing of "The Slope" at North Minto in mid-summer 1944, virtually all underground mines employ vertical shafts, the maximum depth being about 130 feet. A typical headframe is constructed of timber, with two single-deck cages and a top landing. Electric hoists are in general use. At the landing cars are wheeled and dumped by hand. The waste rock is taken over trestles to dumps. The sizing of the coal is effected by stationary inclined gravity screens, single decked shaker screens, and single and double decked vibrating screens. In a few instances picking bolts are employed.

Shafts vary in size from about 6 by 10 feet to 8 by 16 feet. They are plank lined and divided into two or three compartments. Underground the single entry system of mining is by far the more common. Average dimensions are:

double track haulage entries 11 x 6 feet; single track haulage entries 7 x 6 feet; main levels 6 x 6 feet; and counter levels 4.5 x 6 feet. Under The Mining Act "the minimum clearance from top of haulage rail to underside of roof timber in any level shall not be less than 36 inches". In room and pillar mines the rooms or by-levels are turned off at 30- and 36-foot centres. Rooms are 15 and 18 feet wide, and are driven face-on for lengths of 150 to 250 feet. In room and pillar mining the hand pick system is used. In the past both long- and short-wall machines were used. At present one long-wall face is in operation.

Movement of Coal

Handpick - The coal is loaded into cars of 400, 800 to 1200 pound capacity and pushed, manually, on rails to the haulage levels, or even to the shaft bottom.

Longwall - The coal is placed in a shaker conveyor parallelling the face by which it is delivered to the cars on the levels or haulage levels. The cars have a capacity of 800 to 1200 pounds.

BY THE CHAIRMAN - Are you acquainted with mining, Doctor?

A. Just very slightly, Sir.

Q. I won't question you about this then.

DR. ROWLEY continues brief

Ventilation - Considering the field as a whole, ventilation is a difficult problem because of the widespread use of the single entry system. Air shafts are sunk at intervals and fans are placed; booster fans are at times used. Many of the smaller mines depend on natural ventilation. However, because of the nearness of the coal to the surface and the small amount of coal exposed at one time combustible gasses or "fire damp" have never created a hazard. A very few small "blowers" omitting fire damp have been noted; but the quantity given off was so meagre and quickly diluted that samples taken nearly showed no measureable quantity of combustibles on analyses.

The principal problem is that of getting sufficient delivery of air to the face to dilute quickly smoke from explosives. The Mining Act does not specify any specific quantity of air which must be delivered to the underground workings, but rather states:

"141 (1). The ventilation in every mine shall be such that the air in all of its workings that are in use or are to be used by workmen or others shall be free from dangerous amounts of noxious impurities and shall contain sufficient oxygen to obviate danger to the health of anyone employed in such mine....."

Mine air samples are taken and analyzed by the Department. Satisfactory air is considered:

Oxygen not under.....19%

Carbon dioxide not over..... 1.25%

Carbon monoxide not over... 0.01% (or 0.04% for less than 1 hour, not harmful).

Page 1471 follows

DR. ROWLEY produces

Exhibit 79 - Plate of Grand Lake Coal Basin.

(Continues presentation of brief):

Drainage

In general the mines are quite wet and because of the shallowness of the workings season changes may alter the flow of water. Electric and steam pumps are used.

Until recent years most of the successful mines were located where the underground water could be drained by gravity to outcrops of the seam at levels lower than the main workings. Today many of the mines are located in structural depressions where there is no chance for gravity drainage, and a study of the structural map shows that most of the coal reserves are similarly located. Furthermore, some of the present operations are located down-dip from old workings which serve as catchment basins for water entering the underground system. One outstanding example of the latter occurs in the South Minto district (Plate 45-4, Exhibit 79). The ground water situation in the Midland district is undoubtedly one of the reasons why three mines in this area are closed down. One mine in this area for a time pumped 72 tons of water, at a static head of 160 pounds per square inch, per ton of coal raised. Unless means of alleviating the serious water condition are instituted it appears certain that considerable areas of coal will remain unmined, because of the great expense which would be incurred in keeping the workings free of water.

Surface

In general the surface installations consist of the shaft house and tibble, hoist room or building, company store-room, and small changing room for the miners. One mine in the field has a modern wash house equipped with drying facilities for miners' clothes, basins, and showers.

BY COMMISSIONER MORRISON: There is no provision in your Mines Act for men to have a wash house?

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A No sir, there is no provision in the Mines Act.

Q You are acquainted with the Mines Act?

A Oh yes, we are.

Q May I suggest that you consider that carefully?

A We have been doing that, sir.

DR. ROWLEY continues brief:

The larger mines have railway spurs, the smaller ones move the coal by truck.

Man Day Production

The following shows the man day production for underground mining. The figures are based on the entire personnel engaged in the mining operations:

<u>Year</u>	<u>Tons per Man Day</u>
1938.....	1.424
1940.....	1.240
1941.....	1.24
1943.....	1.23
1944.....	1.141

Stripping

In areas where the coal seam lies close to the surface hand-stripping, power shovels and draglines have been used to remove the overburden. Until recent years the maximum cover removed was 15 - 20 feet. Heavier stripping equipment is now being used. The largest dragline has a 150-foot boom with a 6-yard bucket, and is capable of removing overburden to depths of 35 to 40 feet.

The seam is stripped for widths of 30 to 150 feet along the cut, the coal is loaded by power shovels or by hand into trucks which haul it to railway cars or to screening plants.

Man-day production figures do not in any way take into consideration the shovels, draglines, and other equipment used. In 1944 the man-day production varied with different operations from 3 to 9 tons, with an average of 6.1 tons per man-day for the field. In 1944 stripping operations produced 27.4 percent of the total production.

HOUSING CONDITIONS

The following is quoted from a report by Mr. Justice M. B. Archibald - 1941:

"The housing conditions in the area are poor indeed. A considerable proportion of the miners live in houses rented from the operators. Many of them own their own houses.....
...Conditions of overcrowding are to be found in houses owned by individual miners as well as in those owned by operators.

"The water required for drinking and cooking purposes is obtained from wells, some of which are sealed and serve groups of families. Other wells are shallow, and it is surprising that the water has not been contaminated to a degree greater than that reported to me."

BY COMMISSIONER MORRISON: At that point, Archibald's report is 1941?

A Yes sir.

Q Now four years older has there been any improvement in that situation since that time, or is it the same today as it was in 1941?

A The next page, I believe, will give some information.

(Continues brief):

Recently one operator has completed a small number of modern houses, complete with three bedrooms, kitchen and parlour.

BY COMMISSIONER MORRISON: What do you mean by a small number?

A I believe Mr. Evans can give some information.

MR. EVANS: There were six houses, if this refers to what I put up. There were six houses 24 feet square. There is one word there, "parlour"; I don't know about parlour. They have a living room. However, you can call it a parlour if you wish.

BY COMMISSIONER MORRISON: A rose by any other name, you know.

DR. ROWLEY continues brief:

Medical and Hospital Services

There is one medical doctor in Minto and one in Chipman. Minto has an eight-bed hospital complete with X-ray equipment. This hospital is open to the local populace and is directed by a

Board of Governors. The building is owned by the Minto Coal Company, Limited and rented to the Minto Hospital Limited. It is understood that, under present conditions, the hospital is suffering a deficit monthly.

BY MR. FRANKLEY: Who makes up the deficit, do you know?

MR. CLEMENTS: I understand Minto Coal Company Limited has to this date been advancing the money for payment of that deficit. Now if you wish Mr. King will state. I have spoken to his office and I have been so informed there.

DR. ROWLEY continues brief:

Organized Labour

Virtually all the miners in the field are members of District 26, United Mine Workers of America. There is, however, one independent union, the Rothwell Miners' Union.

General Statement

In the Minto-Chipman district 52,643 acres are held under lease by 32 different lessees; the largest single lease is that of the Minto Coal Company, Limited, 20,666 acres. Approximately 2,700 acres are held under license by 16 licensees. Attention is drawn to the fact that the Department of Lands and Mines recognizes, under The Mining Act, only those holding mining licenses and mining leases. As has been mentioned before there were 21 licensees and lessees engaged in mining during 1944. There are operators who work on their own mining rights, on mining rights of others under contract, or who pay the licensee or lessee royalty on coal removed. There were 30 such operators during 1944; of this number 11 must be considered of very minor importance, because of small production and intermittent operation. There were maintained seven company offices with a total personnel of about thirty.

The following table shows the 1944 disposition of coal:

	<u>Short Tons</u>	<u>Per Cent</u>
Used principally for industrial and institutional purposes.....,	143,321	42.8
New Brunswick Electric Power Commission.....	80,311	24.0
Canadian National Railway.....	51,675	15.5
State of Maine.....	29,169	8.7
Canadian Pacific Railway.....	23,368	7.0
Trucked to Fredericton.	3,917	1.2
Province of Quebec.....	2,742	0.8

BY MR. FRAWLEY: Would you just look back on page 32 for a second: "68 mining licenses held by 16 licensees, and 39 mining leases held by 32 lessees." Now on page 39 you speak of 21 licensees and lessees. Is there any explanation for that?

DR. ROWLEY: Engaged in mining. That is reconciled, I think.

MR. TAYLOR: It is on the record in our brief some place that our Association represents from 85 to 95 per cent of the production. That is six or seven.

DR. ROWLEY continues brief:

Preamble to Recommendations

The attention of the Commission is respectfully directed to three very important reports concerning the Grade Lake Coal Basin.

1. Minto Coal Mines - Mr. Justice M. B. Archibald - 1941

An Order-in-Council dated February 24, 1941 commissioned Mr. Justice Archibald to enquire into "the causes of the lack of capacity production in the coal mines in the Minto-Chipman District of the Province of New Brunswick, and to make such recommendations as in his opinion may serve to bring the coal mines in the district into full production and maintain such production for the duration of the war."

BY COMMISSIONER MORRISON: Was that a Federal appointment?

BY THE CHAIRMAN: Yes sir.

DR. ROWLEY continues brief:

This report is the result of very careful investigation

in the District and evidence taken under oath in Fredericton.

2. Review of Minto Area - L. C. Stevens - 1943.

Mr. Stevens is a coal mining engineer from Alberta.

His report was made to the Emergency Coal Production Board after a personal investigation of the field.

BY MR. FRAWLEY: Might I just interrupt you. Dr. Wright has just called my attention to two figures when you were referring to the Maine production. On page 33 you referred to 102,085 tons were exported to Maine?

A Yes.

Q On page 40 you show that the State of Maine took 29,169 short tons of New Brunswick coal?

A That was in 1944. The other was 1942.

MR. EVANS: I would like to draw attention to something that was brought to my attention in connection with railway coal.

BY MR. FRAWLEY: What page?

MR. EVANS: Page 40. Canadian National Railway, 51,675 tons. Now there is a question, I believe, as to whether that coal actually was used in New Brunswick or not. The coal shipped by the operators perhaps from Nova Scotia to New Brunswick may be used in Quebec.

BY THE CHAIRMAN: I understand this table to mean that the disposition of New Brunswick coal to the C.N.R. is 51,675 tons.

MR. EVANS: Yes, but in other places in our brief we point out particularly, so much coal used in New Brunswick, and it may be that some of it has gone out of New Brunswick for use.

MR. TAYLOR: There is just one point that may be mentioned. We discover here today that there have been reports. The L. C. Stevens report in 1943, the Swartzman report that was mentioned this morning. Now everybody seems to have a copy of these reports and have knowledge of them except the operators, and I don't think the Union has either.

BY COMMISSIONER MORRISON: It just shows that you need to be organized. You weren't organized in 1943.

MR. TAYLOR: Well, I think the Union was organized in 1943.

BY MR. FRAWLEY: This report of Stevens, I take it, is a report to the Emergency Coal Production Board. That would not ordinarily be available to the industry. In fact I have never heard of it before. I have heard of Mr. Stevens.

MR. TAYLOR: You see the point, Mr. Frawley?

BY MR. FRAWLEY: I will put it this way. Referring to all three of these reports, if it is decided to put them into the record we will give you notice of it.

BY THE CHAIRMAN: His complaint is that they didn't get the reports.

BY MR. FRAWLEY: I don't think he would be entitled to this report of Mr. Stevens.

DR. WRIGHT: I might explain how we got Mr. Stevens' report. I wrote and asked for it and asked if I might use it. It was not for public distribution at the time, but at the present time we are free to give it to the operators. Mr. Swartzman's report came to my hands accidentally when we were half-way through this; it was just issued; there had not been time to give it to the operators. I feel sure they will all get a copy of that in due time.

BY COMMISSIONER McLAURIN: The operators knew Mr. Stevens was in the field.

MR. TAYLOR: Yes.

BY COMMISSIONER McLAURIN: And you knew who sent him here?

MR. TAYLOR: Yes.

Q And you might anticipate that there would be a report filed?

A We understood that his report was confidential and we weren't to get a copy.

BY MR. FRAWLEY: That is true, or perhaps I should say that the Stevens report was handed to me from the Director of the Bureau but under such conditions that we could not make free use of it, but I phoned Ottawa yesterday and got permission to use it.

BY COMMISSIONER MORRISON: Mr. Taylor, as president of the organization, is this condition still prevailing in Minto, that men are pushing cars 1000 and 1400 feet?

MR. TAYLOR: I would say there are cases of that, yes.

BY COMMISSIONER MORRISON: In 1945 men are pushing cars 1000 feet?

BY MR. FRAWLEY: Do they get extra pay for that?

MR. TAYLOR: The volume of coal is so low. When you put in a haulage what happens is that the lowest economic tonnage you can use on haulage is probably about 80 tons a day, and in this small seam where the recovery is only about 300 tons to the acre. There are a great many cases; it is not exceptional, I would say. That 1400 feet might be unusual or it might not be unusual, but then it is a matter of bargaining between the employee and the operator as to what consideration he should be paid for that longer haul, but the reason that the haulage cannot be installed economically is that you don't have the tonnage; it would run your tonnage costs up.

BY COMMISSIONER MORRISON: Well, are the cars modern cars? Are they ball-bearing, timpkin-bearing? Is it an easy proposition?

MR. TAYLOR: Some are, some are not. As far as the friction of pushing is concerned it is minor; it is the up-drag and the grades against the miner.

Q You have got away from wooden rails though?

A Yes. There may be some small mines, I won't say definitely that there is not, but I am talking of our Association.

Q But you have switches? You don't have the old turntable any more?

A No, but it is a very difficult operation and it is difficult for the miners. I noticed in something I read it was critical, and it was right too. The only way to overcome that is in the mine management trying to keep our work localised to one part of the pit. I think every operator is trying

to do that to do away with the necessity of long distances.

BY MR. FRANKLEY: Mr. Chairman, may I call to your attention there are 11 operators in the Minto field, 11 out of 26, that have not even a tonnage of more than 1000 tons to report per annum. Some of those operators must be very small.

BY COMMISSIONER MORRISON: We call them wagon mines in Alberta.

MR. TAYLOR: There is an explanation of that in a great many of these cases. The coal is held in the Crown here but in the old days people that owned the surface felt they owned everything under it. There are quite a few farmers there when they changed over who managed to maintain the coal rights under their own farms, and that is the explanation in a great many cases. It is not a whole year around operation but they have this coal on their farms and they think they have a prior right to it.

BY COMMISSIONER MORRISON: They go and dig a little coal the same as they would their potatoes?

BY THE CHAIRMAN: Is that bootleg mines?

BY COMMISSIONER MORRISON: By the way, have you any of that in New Brunswick?

MR. CLEMENTS: We have no bootleg mines in New Brunswick.

BY COMMISSIONER MORRISON: We are still talking about coal now.

BY THE CHAIRMAN: It is not a fact then that the Crown owns all the coal in New Brunswick?

MR. CLEMENTS: There is just a different interpretation. Mr. Taylor's statement said that the owners felt that they had, but they did take out mining rights and they still maintain mining rights.

BY MR. GUSS: Isn't it a fact that some of the mines are operated under a sublease that was held by some other private ownership?

MR. CLEMENTS: No, there is no coal owned under private ownership.

BY THE CHAIRMAN: No, he is asking, is there any subletting?

MR. CLEMENTS: That is something I can't answer. Under the Mining Act we do not have anything to do with subleasing.

BY MR. GUSS: Your Mining Department don't know if some of those small operators are paying a sublease?

MR. CLEMENTS: Yes, we do know that that exists. There may be a lessee who permits an operator to operate on his lease, but we collect the royalty from the lessess and we are concerned only with the lessee. What he does with that coal is something we can't control.

MR. GUSS: The reason I brought this point up, private ownership on those farms, we have some in New Brunswick subleased from other companies that hold the lease.

BY MR. FRAWLEY: That hold a lease from the Crown?

MR. GUSS: Yes.

BY MR. FRAWLEY: Mr. Clements, do you not require that those subleases be approved by the Minister of Mines?

MR. CLEMENTS: No, we don't admit of a sublease. It will be a formal transfer and assignment of the lease or part of the lease, and we hold the lessee responsible for the conduct of that operation.

BY COMMISSIONER McLAURIN: The only thing you recognize is an unconditional alienation by the lessee?

MR. CLEMENTS: Yes.

DR. ROWLEY continues presentation of brief:

In this (Stevens) report attention is given to underground haulage and the economies which would result from more general use of haulage. Mr. Stevens states - "page 10..... while rope hauls are in use this system has not been developed any further than main road haulage. The cars still have to be pushed long distances. Some are pushed 1000 feet and at one mine a complaint was made because the push was 1400 feet.....
page 4 - Generally speaking, the cost of this transportation

is very high, ranging up to 64 cents per ton. This price compares with 16½ cents per ton at a mine using rope haulage and more concentrated mining methods..... page 9 - Underground haulage could be laid out (branch ropes could be used to advantage) whereby much less labour would be needed and consequent costs be reduced."

3. A Report on a Plan for the Beneficiation of the New Brunswick Coal Industry - E. Swartzman, Fuel Research Laboratories, Bureau of Mines, Ottawa. (R.I.C.S. No. 195 - December, 1944)

This report is based on very considerable work by the Fuel Research Laboratories including mechanical cleaning and carbonization (coking) tests, on "Preliminary Report - Investigations as to the need for a Central Cleaning Plant to serve the New Brunswick Field" (prepared at request of The Advisory Board of Economics and Industrial Development of New Brunswick) and on personal observations by the author. In the Report, page 4, it states - "The amount of coal obtained from stripping mines also decreased from 92,290 tons in 1941 to 29,336 tons in 1942." The figure 29,336 tons was obtained from the Dominion Bureau of Statistics and is incorrect; it should read 103,391 tons. It is believed that this error resulted from the fact that considerable quantities of stripped coal were screened and the reports submitted to the Dominion Bureau of Statistics did not state "stripped coal".

In Mr. Swartzman's report it is stated: "Unless the quality of the New Brunswick coal is appreciably improved by suitable methods of preparation this available market (industrial and domestic) is bound to decrease, especially when strong peacetime competition is again revived."

In the interest of continued coal production in New Brunswick it is absolutely essential that coal of the best possible grade be offered, and this coal must be mined and prepared at the lowest possible cost in order that the competition of other coals may be met.

BY THE CHAIRMAN: Is that a quotation?

DR. ROWLEY: No.

BY MR. FRAWLEY: Perhaps this is as good a time as any to put to you the opposite view. The operators' submission says: We don't see any particular benefit or good to come from beneficiation of these coals, washing them, sizing them, treating them. Our market should be the industrial and the power plant market. That, I think, sums up what they say to this Commission. What do you think about that?

DR. ROWLEY: That is as to whether or not we should strive to get a domestic market?

BY MR. FRAWLEY: Yes, or should the operators just say, abandon the domestic market. Take Fredericton alone, it is the nearest centre of any population to the field, isn't it?

A Yes.

Q And they took 1.2 per cent of the production, a total of 3,917 tons, in the whole year 1944. That is understood when people realize that the people of Fredericton keep themselves warm by using wood. The operators say, "Forget about this domestic market entirely. Let's concentrate on getting the fuel out that doesn't need to be beneficiated. It is ideal for using in pulverizing plants. Let's stick to that."

DR. ROWLEY: Well, we have the immediate picture and we have of course the long-term picture with respect to fuel requirements in the province and my feeling is that if the output can be absorbed by industrial outlets that is quite all right, but we as a Province should be studying continually the effect of beneficiation on our coals and their possible use in domestic fuels. That includes coking too, to my mind.

BY MR. FRAWLEY: I certainly agree with you that you should be doing it, but I wonder what you think of this attitude of the men who are getting the coal out, 95 per cent of it?

DR. ROWLEY: Well, I would prefer if you would leave that question to Mr. Clements.

BY THE CHAIRMAN: Or perhaps it may be a Government policy that neither one of these gentlemen are qualified to make. I don't mean qualified; I mean supposed to.

MR. CLEMENTS: May I just interject that we have a summary statement on page 46.

BY MR. FRANKLEY: We will wait then and let Dr. Rowley finish reading.

DR. ROWLEY continues brief:

Consolidation or Re-allocation of Mining Rights

With regard to the consolidation of mining rights it is considered that under existing laws and customs the initiative cannot be taken by the Provincial Government; but rather that the licensees and lessees, being cognizant of the need of long term planning in coal mining, should cause the necessary changes to be made. Re-allocation of mining rights is a matter of Provincial Government concern and it is being given consideration.

Consolidation or re-allocation would permit of systematic and scientific mining in proper sequence. In this respect it has already been mentioned under "Drainage" that some of the underground workings have difficulty with water from older workings located "up-dip" on the seam. It is desired that future openings be made in proper sequence to prevent, insofar as possible, this difficulty.

Mr. Justice Archibald, page 13, states: "Evidence indicates that in at least two instances profitable mining operations had to be abandoned because the workings were encroaching on another operator's property at places not near the latter's operations and at locations where the opening of a new mine was not contemplated."

Mr. Swartzman, page 26, states: "Independent mining by such a large number of operators with little or no reference to one another and without co-operation in a field with such a thin seam as that available in Minto, and producing such a relatively small tonnage, has resulted in a random, and, generally speaking, unplanned exploitation of the coal."

BY THE CHAIRMAN: On the other hand we in Sydney complain that we have operators down there who own everything, operate everything. I am not expressing an opinion either way.

DR. ROWLEY continues brief:

The cessation of underground operations because the lease boundary had been reached has on a number of occasions interfered with the economic removal of blocks of coal. (See Map of Mining Rights, Exhibit 78). In cases where the lease boundary is crossed the operator normally pays the lessee a royalty on coal removed; this, of course, adds to the cost of production. There is one example in the field where Lessee A is paying royalty to Lessee B for coal removed from B's lease, while simultaneously Lessee B is paying royalty to Lessee A for coal removed from A's lease.

MR. TAYLOR: I might say that the way that is worded there is an inference that it is poor business practice. I think that refers to an arrangement between the Minto Coal Company and ours.

BY MR. FRAWLEY: Who is A and who is B?

MR. TAYLOR: We will call Minto A. Our property lines come together at many points. We are mining coal under royalty to the Minto Coal Company in a shaft. They have a shaft operation that runs on some of our holdings and we made arrangements under the same royalty basis that they can continue with their stripping and strip coal there. It is very difficult, it is practically impossible to forecast the tonnage under a certain acreage underground, so for that reason, as the Minto Coal Company mines coal from us they pay us a certain sum, and as we mine coal from them we pay for the tonnage removed that month. It is a monthly settlement on that basis. You can't forecast how much tonnage you are going to get.

BY THE CHAIRMAN: There doesn't seem anything wrong with that. Were your remarks critical?

DR. ROWLEY: Just a statement of fact.

BY COMMISSIONER McLAURIN: I don't see why we should be so disturbed about these aspects.

MR. CLEMENTS: The only point in noting that was that we felt that was definitely a cost of production and if it were possible to re-allocate the two sections we would have certainly a reduced cost of production per ton.

BY COMMISSIONER McLAURIN: Well, this deal with these two parties would amount to a re-allocation.

MR. CLEMENTS: No sir, we don't consider that.

BY COMMISSIONER McLAURIN: Well, a practical re-allocation. If they want to increase their cost, let them do it. Let natural economics determine whether they are going to lose their shirts in the deal they make. That is definitely my temperament about this anyway. Till we have some other system in this country let them go ahead.

BY MR. WADE: Wouldn't you agree in this point that we are discussing, it is not merely a question of the operators suffering but the mine staff, by increased costs of production? That is part of your point, isn't it? That when costs of production are raised unnecessarily it is not merely the operator that suffers, it is also the community, the people, if the coal cannot be sold?

DR. ROWLEY: Well, if you make the premise that the coal cannot be sold I suppose your statement would be correct.
(Continues brief):

It is believed that so many separate operations require an administrative and supervisory personnel in excess of what should be needed.

MR. TAYLOR: I don't think the operators can let that statement go unchallenged. It is a bald statement.

BY MR. FRANKLEY: You complain about the figures, Mr. Taylor?

MR. TAYLOR: I complain about the statement. I am stating the amount of work that is necessary whether it is under consolidation or under five or six different ownerships. We all

know that a great many statistics have to be kept; we know that accurate records have to be kept. I can't accept that bald statement there that if there was a consolidation in the district that less people would be employed. I don't believe it.

BY MR. FRAWLEY: Let's see how far you go. If this whole Minto field were operated by one person do you think it would make for a more efficient operation, reduced costs in other words?

BY THE CHAIRMAN: Reduced administrative costs.

BY MR. FRAWLEY: Reduced administrative and supervisory costs?

MR. TAYLOR: Well, you bring up a question there: how efficient is that administration going to be? You are bringing up a question there. The Lord is not going to come down and carry on that administration.

BY COMMISSIONER McLAURIN: You get right into the field of ideology; which system may work and which won't.

MR. TAYLOR: We are not talking about efficiency at all. So far as that allegation there goes the bald statement is made that if it were consolidated there would be less office staff and less administration. We don't accept that.

BY MR. FRAWLEY: If this whole field was operated by one company then at least there would be fewer managers, we will say, men in the \$6,000 to \$8,000 a year class?

MR. TAYLOR: No, I think there would be more.

BY MR. FRAWLEY: Seriously, why wouldn't there be fewer? For instance, if you were the head of the company that was operating this whole field you wouldn't need to employ all those operators that you now find out there to assist you?

MR. TAYLOR: You would have to employ men in a comparable capacity to get supervision.

Q You think you would have to have as many out there to supervise the operation you are going to manage as there are now?

A Definitely.

BY COMMISSIONER McLAURIN: He may be right too, Mr. Frawley.

MR. TAYLOR: I say that definitely.

BY COMMISSIONER McLAURIN: The Sirois report considered the desirability of consolidating the Maritime Provinces and they came to the decision that no saving would be effected by consolidating the Maritime Provinces. I would rather have Mr. Taylor's opinion, who has been running these mines, than have the opinion of somebody who never ran them.

BY MR. FRAWLEY: That may be. I am not offering my opinion.

BY COMMISSIONER McLAURIN: For all I know, when you are mining 30-inch seams probably it is just as well to have seven or ten or fifteen operators rather than one big one.

MR. TAYLOR: The present managers act as their own purchasing agents. Now they all have to do that as part of their work. If there was a consolidation you would have to have a general purchasing agent and probably an assistant.

BY COMMISSIONER MORRISON: And an executive assistant.

MR. TAYLOR: You would be just taking the same people and giving them specific duties.

BY COMMISSIONER McLAURIN: You must compare like things. The Minto field as far as I know is the only one of its kind on this continent. You must not expect the operation here to be like anywhere else. We are getting completely away from realities. We should not come in here as amateurs and tell those operators how to operate their field.

BY MR. FRAWLEY: All I would say, it is a more remarkable field than I ever thought it was if it takes these seven rather high-class men to take out something under half a million tons a year.

BY COMMISSIONER McLAURIN: The Drumheller mines don't get more, a lot of them, than 100,000 tons a year. Are you going to consolidate them?

BY MR. FRAWLEY: There is only one mine getting 100,000 tons a year, the Minto, then you drop down to the Avon which gets 50,000 to 60,000 tons a year. However

DR. ROWLEY continues brief:

The following comparative figures are computed from the last Coal Statistics for Canada, 1942:

Administrative and Supervisory Personnel
per 1000 Employees

New Brunswick 177

Nova Scotia 108

Mr. Justice Archibald states on pages 11, 12 and 13:

"..... my enquiries and the evidence convince me that the mining of coal as at present carried on there is uneconomical, because there is too much duplication of effort and of servicesas an illustration of the duplication.....it should be noted that the five companies already referred to have administrative systems involving general managers, (assistant managers in some cases), accounting officials, paymasters, and mining engineering services. Each of the operators admits that one, or at most two, such services would be adequate for the needs of the entire coal mining operations in the area.

"Two of the results apparent by reason of those duplications of administrative service are:

"(a) That the salary costs for managerial, accounting and paymaster services are excessive having regard to the size of the operation.

"(b) That the engineering services in the area suffer because the effort to reduce engineering costs to each operator has had the result that there is not sufficient engineering."

Mr. Stevens states, pages 9 and 11: "Methods of working show an almost complete lack of engineering knowledge as applied to this industry.....Reference to lack of engineering brings to mind the remark of one operator, 'we don't waste much money on this'.....but it is the writer's (Stevens) definite opinion

that the conduct of mining operations is an engineering problem."

Central Marketing Agency

It is considered that such an agency should cover all sales from the field. Stable markets should be maintained and thus a stable industry would be assured.

BY COMMISSIONER MORRISON: That is your own view?

DR. ROWLEY: That is the view of the Provincial Government.

BY COMMISSIONER MORRISON: With which I heartily concur.

DR. ROWLEY continues brief:

It would also be very advisable for this agency to carry on or cause to be carried on research as to the most satisfactory types of grates and furnaces for the burning of this particular type of coal. Publicity could then be used to acquaint possible purchasers with the burning qualities of the coal and the proper combustion equipment. Mr. Justice Archibald states, page 20: "There has been no concerted move by them (operators) to demonstrate to or popularize with potential customers in the Province of New Brunswick the qualities of the coal.....and no concerted effort has been made to increase materially its sales in that Province."

Freight Rates

Under the existing freight rate structure there are many instances of per-ton-mile rates which are considerably lower for coal being moved into the Province than for coal being moved from point to point within the Province. The following are examples:

	<u>Miles</u>	<u>Rate</u>	<u>Per Ton Mile</u>
Minto to Edmundston (C.P.R.)	199	\$1.10	\$0.0055
Springhill Junction, N.S. to Edmundston (C.N.R.)	297	1.20	0.0040
Chipman to Grand Falls (C.N.R.)	137	1.40	0.0103
Springhill Junction, N.S., to Grand Falls (C.N.R.)	261	1.40	0.0054

New Mines

It is considered that, in the interest of the industry, no new mines should be opened until the production is needed

and the market is assured.

BY COMMISSIONER MORRISON: That is definitely the view of the Provincial Government?

MR. CLEMENTS: I think I may say, sir, that that certainly is, and we might think of that applying in part to stripping operations, where an individual might come into the field for a very short period of time and attempt to encroach upon the markets of others over that short period of time possibly at a reduced rate, and it certainly does not lead to a stable industry.

BY COMMISSIONER MORRISON: I am not quarrelling with that. On the contrary I wish it was the view of all Provincial Governments.

BY MR. FRANKLEY: What have you got to say about the opening of new mines? Do you keep some control over that?

MR. CLEMENTS: I am sorry to say, sir, at the moment we have not, but it is under consideration. It would have to be the subject of legislation.

MR. EVANS: In connection with that central marketing agency I would like to inform the Commission that in that brief that we prepared in 1938 and presented at Ottawa in 1939, we had a committee that we called the Central Selling Agency Committee. We had a great number of meetings and we went into the question very thoroughly. We had a contract drawn up, in fact, for a selling agency. A firm was prepared to take hold of it, but there were certain things that had to be done. Now we made a report at that time to the Minister of Lands and Mines stating the facts as we saw them and making certain recommendations. One of the recommendations was just this very point that is brought out here, that no new mines should be opened, because we saw what was going on at that time. There was talk of another mine being opened. All labor was employed, as I remember, and the market was being supplied. If another mine would open they would take some of the labor from the others, cut down the production at each mine.

BY COMMISSIONER MORRISON: Put them on a half-a-loaf basis?

MR. EVANS: The whole thing would be thrown into disorder, markets and labor and everything. We saw that and made that recommendation and others, and the establishment of a central selling agency was based on those recommendations being implemented.

BY COMMISSIONER MORRISON: Where did you make those recommendations to?

MR. EVANS: Some were made to the Minister of Lands and Mines here, which were provincial, and the others were made to Ottawa, to the Fuel Committee of the Cabinet.

MR. TAYLOR: There was a brief presented to the Department of Mines.

MR. EVANS: We got nothing out of either provincial or dominion, so we couldn't go ahead with the central selling agency. The result was some of us did appoint one firm to sell production.

BY COMMISSIONER MORRISON: I think you sold them the idea, because it is now part of their policy.

MR. EVANS: Well, it has taken several years. However, I want to point out that the operators in the last page or two have been criticised. Those are some things we recommended years ago.

BY THE CHAIRMAN: You are both against the idea of free enterprise?

BY COMMISSIONER MORRISON: You have had some experience in legislative matters, I understand, and haven't you found that it is rather difficult to deal with people that are unorganized and travelling different directions and different views? Hasn't that been your experience generally, looking at it from a purely administrative point of view on the part of the Minister of Mines?

MR. EVANS: We were organized and we were united then and worked together, and we got the furthest we ever got at

that time.

BY COMMISSIONER MORRISON: You were organized then?

MR. EVANS: Yes.

Q But that would be a difficulty, would it not?

A It would if it existed, but we had done all this work, we worked for weeks and months and we had an organization.

Q I have been dealing with operators for a few years now and this situation doesn't happen in your organization? When you hold a meeting--I am not trying to pry into the internal economy of your organization and don't answer my question if you think it is unfair--but the operators hold their meeting and they pass a resolution and somebody is appointed, a committee is appointed, to go to the Minister of Mines and demand that A, B and C be the program, and before the committee gets there one operator writes a very lengthy letter to the Minister pointing out something entirely different to the resolution that was passed in solemn conclave just a day or two before.

A I don't remember of having had it. I don't know that we had it in connection with what I am speaking of. I think we should submit that; we have copies of it.

BY MR. FRAWLEY: I have just been handed by Dr. Petrie a copy of the brief submitted to Hon. T. A. Crerar, Minister of Mines and Resources, December 9, 1938; then there is a brief submitted to the Minister of Lands and Mines for New Brunswick. If I could have that?

MR. TAYLOR: At that time this New Brunswick Coal Operators Association was largely as a result of Judge Archibald's report, and you will see in his report that he makes recommendations. We were criticized as not being friendly with one another and at that time we made an honest and sincere effort to implement some of the recommendations in his report, and one of them was a central selling agency. We became organized and at that meeting in Minto 97 percent of the coal production was represented. The Minister of the Department was good enough

to come down to Hinto and attend that meeting and in his presence, with all those operators present, this resolution was passed regarding the central selling agency, and also the resolution that no new openings be made unless there was a market. We find here that the Government is presenting all kinds of references to former briefs and other days, some dating back some time, that we have no knowledge of, but there is no reference to the briefs that the operators submitted in the past years and I believe it would be in order if we secured those briefs and placed them in evidence.

BY COMMISSIONER MORRISON: Now that they have come around to your way of thinking and are suggesting to this Commission these two points in particular which we will give you the credit of fathering if you wish, or your Association, you have no quarrel with the Provincial Government on these two points in question?

MR. TAYLOR: Well, the question of a central selling agency will work out in some places and some places it won't.

Q In 1938 you definitely asked for this?

A We asked definitely for the central selling agency.

Q And now that the Honorable Minister is prepared to state that is Provincial Government policy before this Commission, surely you have no argument with the Honorable Minister of Mines of the Province of New Brunswick when he is, even at this late date, submitting to this Commission what your Association came up here and asked for seven years ago?

A We found out that it is practical in some ways. We felt at that time that a central selling agency couldn't exist on a voluntary basis, that it had to be mandatory, and we asked for legislation along that line.

Q Are you still of the same opinion, so that we will have no quarrel with the Honorable the Minister of Mines?

A I think that a central selling agency could be worked out with due regard to the present connections that some individual operators have established.

Q Because if the coal operators are of one opinion with the Honorable the Minister of Mines then there should not be much trouble in setting up the central selling agency.

BY MR. FRANKLEY: You must not press the Government too far. They say: "It is considered that such an agency should cover all sales from the field." They don't commit themselves to introduce legislation to set it up.

DR. ROWLEY: They are in favor of the idea.

BY COMMISSIONER MORRISON: The word "considered" when used by Government is a pretty wide term.

MR. TAYLOR: I believe, in answer to your question, that something can satisfactorily be worked out.

BY THE CHAIRMAN: But certainly nobody ever conceived the idea that a Government in New Brunswick should create a selling agency for the operators by statute?

MR. TAYLOR: It was just following out Judge Archibald's report, and he recommended it.

BY THE CHAIRMAN: No, but did you recommend to the Government that they should by statute make it definitely compulsory that you should create a central marketing agency?

MR. A No.

BY THE CHAIRMAN: That is what I am suggesting in answer to the criticism of the Government in not setting this thing up. No Government, I think, would undertake that.

BY MR. FRANKLEY: That is the way every apple is sold in British Columbia.

MR. STREETER: I wonder if one couldn't qualify this idea of the central selling agency. In other words, isn't this the point, that they want us to arrange some method whereby we will not be in a destructive competitive situation? Let's not say a central marketing agency; let's get that idea that that is the thing that we want to accomplish. Whether we accomplish it among ourselves or whether we appoint an agent, what is the difference?

BY THE CHAIRMAN: Haven't you an agent now?

MR. STREETER: We have an agency now for some of our business. I say "we"; most of us.

Q And you went to Montreal to get him?

A Because of course the fuel agents of the two railways are in Montreal, and this agent we appointed has contacts with them in other ways. They sell them other outputs of coal.

BY MR. FRAWLEY: Does the Weaver Company only operate to sell the coal to railways?

MR. STREETER: For some operators, and the Power Commission

Q And how about the pulp companies?

A No.

BY MR. FRAWLEY: It is only a step towards a selling agency.

MR. CONNORS: The company I represent (Welton and Henderson) didn't go into the agency. The result was we found ourselves on the outside; that we can sell coal to the consumers which the other operators weren't selling coal to. We had a market with the C.N.R. and simply because we didn't go in with the central selling agency we were cut off from that market. I want to make that clear; that is one reason we didn't go in.

BY COMMISSIONER McLURIN: And you are not in now?

MR. CONNORS: No, we are not selling to the C.N.R. at the present time and the reason we were told we were cut off was simply because we didn't go through this selling agency.

MR. S. C. WELBY (General Fuel Agent, Canadian National Railways): I would like to make this statement that that is absolutely incorrect. Welton and Henderson were shipping to us for a long while after they got out of the selling agency and the reason I think that they are not shipping to us today is that, like many other operators, they have not got much coal to offer to us.

MR. CONNORS: I don't want to contradict Mr. Welby on this statement being incorrect but ---

BY THE CHAIRMAN: If there is any contradiction you will both be put under oath.

MR. CONNORS: I can take the oath and say that we were cut off for a period of time for that reason.

BY COMMISSIONER MORRISON: Now we are not going to turn this into a debating society.

MR. STREETER: My company has appointed the Weaver Company as agents but we are not shipping to the C.N.R. and have not been for some time.

MR. EVANS: I did ship to the C.N.R. but at the present time and for some months past I am not shipping to the C.N.R. I haven't the coal at the present time. It is not because of the reason given by Mr. Connors at all.

MR. CLEMENTS: I would like to put in the records that brief which was submitted to Hon. T. A. Crerar, December 9, 1938, signed H. R. Pettigrove, chairman, W. Benton Evans, secretary. There was a special committee named, appointed by Hon. F. W. Pirie, Minister of Lands and Mines, and Mr. Pettigrove was at that time employed by the Provincial Government.

BY MR. FRAWLEY: I have that, and that will at the proper time go into the record of this Commission.

DR. ROWLEY continues presentation of Brief:
Preparation, Beneficiation, and Coking of Coal

Mr. Swartzman states, page 11 - "The beneficiation of Minto coal has been investigated since 1923 when the first systematic study of coal in the area was made by the Dominion Department of Mines. During the intervening years many laboratory, semi-commercial and commercial tests have been conducted on various Minto coals, and it has been concluded that, although this coal is not easy to wash, standard equipment may be employed to effect a separation with the resultant production of a relatively clean product." With regard to coking Mr. Swartzman states, page 25 - "All the above data serves to indicate that from an economic viewpoint it may be concluded that coal

cleaning associated with the production of a suitable domestic coke would have a beneficial influence on stabilizing the coal industry in the Minto coalfield providing there is proper co-ordination of effort." Whether it would be more economical to have but more careful preparation, or include mechanical cleaning, or coking, is not now clearly known. Only large scale tests with commercial equipment and a subsequent study of the products and markets will determine the course to follow.

Water Conditions in Mines

The seriousness of the water situation has been mentioned under "Drainage". It is believed that a thorough study by the Department of Mines and Resources in collaboration with the Department of Lands and Mines might result in a drainage plan which would serve to decrease the excessive underground water encountered in mining.

Diamond Drilling

An extensive drilling programme in the Grand Lake field would assist mining by:

1. Delineating the boundaries, structure, and nature of the coal in unexplored areas.
2. Providing more information on the details of minor structures which affect the economics of mining.
3. Outlining territory favorable for stripping operations.
4. Providing information required in formulating a long term plan for the field.

BY THE CHAIRMAN: In other words, you haven't reached the conclusion yet that you know all your reserves of coal in this province?

DR. ROWLEY: That is correct. (Continues brief):

Geological Survey

Very little geological information is available concerning the large area of Pennsylvanian in central New Brunswick. Geological surveys might assist in:

1. Selecting areas which should be drilled for coal.
2. Accumulating data having a bearing on petroleum possibilities.

Hospital

As has been mentioned under "Medical and Hospital Services" there is an eight-bed hospital in Minto operated by the Minto Hospital Limited. This hospital was opened in the spring of 1944. The Minto Coal Company, Limited, which owns the building, has to this date been advancing the money for the monthly deficit. The hospital is not used exclusively by miners and their families, but by any who are able to reach it.

It is felt that the existence of a hospital could be made more secure by a participating plan, in which the miners, operators, and Provincial Government might co-operate.

BY COMMISSIONER MORRISON: Surely the Government doesn't expect the Minto Coal Company to keep on paying the deficit indefinitely, do they?

DR. ROWLEY: No, that was the point.

BY THE CHAIRMAN: Was there any attempt made to get this little hospital within those various organizations that are being worked out now, the Blue Hospital Association and the Maritime Hospital Association?

DR. ROWLEY: -- representative of the Blue Cross organization was in the field and I can't say authoritatively, because I have not seen him after his visit, but I understand that he really didn't have very much success.

BY THE CHAIRMAN: I met him in Saint John the day before yesterday.

DR. ROWLEY: I really can't say what the objections were.
(Continues brief):

The Provincial Government, therefore, respectfully recommends for the consideration of the Commission:

1. THAT the consolidation or re-allocation of mining rights in the Grand Lake Basin be considered.

MR. TAYLOR: In connection with that first recommendation, it seems to me that that is a provincial matter. One of the conditions of the lease is that they should be operated by the operator in a workmanlike manner. It seems to me that if the

Province wishes to do anything, as the lessor they have quite an instrument in their own hands.

BY MR. FRAWLEY: It would have to be by legislation.

MR. TAYLOR: No, that is not my meaning. In the terms of the lease--I don't believe you have an exhibit here. I think it should be in your records.

BY MR. FRAWLEY: Mr. Clements could produce a copy of the lease.

MR. CLEMENTS: I have sent copies to Mr. Howland.

MR. TAYLOR: I think that under the terms of that lease the Province has a good deal of authority, because we have certain obligations to the owners, who are the people under the Crown.

BY COMMISSIONER McLURIN: But he really contemplates something more. Whether it might be an interference by the Province with vested rights, contractual rights....

DR. ROWLEY continues brief:

2. THAT the advisability of a central marketing agency be considered.

3. THAT the freight rate structure concerning the movement of coal in New Brunswick be considered.

4. THAT under supervision of the Provincial Government no new mines be opened until the production is needed and the markets are assured.

5. THAT further study of the economic advisability of better coal preparation and of beneficiation (mechanical cleaning) and carbonizing (coking) the coal be completed.

6. THAT a Federal-Provincial survey of water conditions in and about the mines be made.

7. THAT an extensive programme of diamond drilling in the Grand Lake Basin sponsored by the Federal and Provincial Governments be undertaken.

BY D. N. MACDONALD: Would that mean no new mines or no new operators?

BY MR. FRANKLEY: That is a repetition of what has been said before. There would be no new mine opened by anybody.

MR. TAYLOR: I think there should be some clarification. It is all according to what you call a mine. Perhaps some people wouldn't call them mines at all, but a lessee in the development of his work has to sink new shafts periodically.

BY COMMISSIONER MORRISON: Oh yes, that is understood.

MR. McDONALD: That is the point I am getting at. An operator could sink half-a-dozen shafts if he had the leases.

BY THE CHAIRMAN: It would be an operator. It would not be a new mine.

DR. ROWLEY continues brief:

8. THAT a geological survey of the large areas of Pennsylvanian rocks in central New Brunswick be undertaken by the Federal Government.

9. THAT the continued maintenance of a hospital in the field be considered.

(Tables I to V inclusive appear at end of Volume).

BY THE CHAIRMAN: I want to say in connection with freight rates that we have been fortunate enough to secure the services of Mr. Rand Matheson, whom probably everybody knows who has anything to do with transportation, and we are taking Mr. Matheson not only to the province of Nova Scotia but throughout the Dominion, and I have no doubt in the world that if there is anything wrong or to the hazard or to the detriment of the coal operators in this country or in any country that Mr. Matheson will help us in unravelling the difficulties. I am happy to be able to make this announcement, because we got the co-operation not only of the Central Board of Trade of the Maritimes but of the three Governments of the Maritime Provinces in loaning us Mr. Matheson. This Commission is paying Mr. Matheson his salary and expenses when he leaves the Maritimes, and we have been paying--or we promised to pay--his expenses while he is in the Maritimes.

BY MR. FRAWLEY: Mr. Clements, would you make just a brief observation with respect to the powers of the Minister to cancel leases?

A That is clarified by reading section 57, sub-section 1 of the Mining Act.

Q What is the citation of the Mines Act? What do you call it?

A The Mining Act.

Q There is a separate statute called the Coal Mines Regulation Act?

A No sir, those are additional sections under the Act. Section 57, sub-section 1, heading "Forfeiture - Whenever it shall be represented to, or shall come to the knowledge of the Minister, that work upon any mine or mining operations upon any area held or claimed under a lease from the Crown, or under a lease granted pursuant to this Act, have been abandoned or not carried on for the space of six months, or have not been efficiently and continuously carried on, or or have been carried on only colorably, or to prevent a forfeiture under the terms of such lease, the Minister may cause a notice to the effect of the (Form M) to this Act to be served personally, or by sending by registered mail upon the lessee, or some one of the lessees, where more than one are included in the same lease, or on his or their agent or person principally employed on the premises or shall cause such notice to be posted upon the premises leased, where the address of no person is known upon whom to make service thereof, personally or by registered mail, informing him of such charge or information, and appointing a time, to be not less than thirty days after the service or posting up of such notice, and also a place for the investigation thereof." I may say without reading that, that a hearing is held before the Minister in which the lessee is given an opportunity to present his case and state the facts or reasons explaining the circumstances which caused the lack of work.

1. The first part of the book is devoted to a general survey of the history of the world.

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30. The thirtieth part of the book is devoted to a general survey of the history of the world.

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33. The thirty-third part of the book is devoted to a general survey of the history of the world.

BY MR. FRAWLEY: How much work he is required to do, that is provided for in the lease itself?

A "Have been abandoned or not carried on for the space of six months."

Q That is if the work terminated for the space of six months or over the lease would be subject to forfeiture?

A That is not necessarily carried out, but it can be. Then in the lease document: "The lessee further agrees that if he fails to pay the rent or royalty hereby reserved at the time appointed for payment or to duly observe and keep any other matter or thing by him covenanted and agreed to be done or observed then and in every such case the lessor may without any other proceeding than is provided for under the provisions of the said Mining Act, declare this lease to be forfeited, and thereupon the rights granted by this lease shall revert to the lessor and the same may be released or otherwise disposed of as though this lease had not been made, and the said lessor shall have the right of re-entry, but notwithstanding such forfeiture the lessee shall remain liable in respect to any debt, claim, liability or default existing at the date of such forfeiture."

Now I probably should have read a section which occurs before that: "The lessee will at all times work any mine on the demised premises in a good and workmanlike manner, and will observe and conform to the provisions of the said Mining Act and all such orders and regulations as are duly made in that behalf."

BY MR. FRAWLEY: That is the only provision that you have in regard to cancellation, that is forfeiture of the lease? You have no provision which would give the Lieutenant-Governor-in-Council or Minister of Mines power to cancel a lease for any other reason?

MR. CLEMENTS: Well, it would have to be non-working of the mines or infringement of the provisions of the Mining Act.

Q And the degree of working is for determination by the Minister, is it?

A That would be the determination of the Minister, with what assistance he could get from his officials. I might say the term used there is "colourable work" and that definitely would be taken into consideration.

MR. STREETER: A great deal of reference has been made to this Stevens report. I think I am correct in saying that the operators do not agree with many of the recommendations made in the Stevens report. We definitely do not agree with the inferences drawn by Stevens. We would therefore, I think, like to give you in detail a criticism of the Stevens report, and if possible, if you could allow us to do so--you are not sitting here Monday so we couldn't bring it in then--if you would allow us to give you our criticism of the Stevens report by writing?

BY THE CHAIRMAN: Mr. Taylor took up that question this morning and we told Mr. Taylor we would be glad to, if you would appear at Ottawa or any other place.

MR. STREETER: Would you at the same time allow us to send to the Commission a letter of detailed criticism, and then if you consider it necessary for us to appear we will of course appear.

BY THE CHAIRMAN: All right, that is satisfactory.

BY MR. FRAWLEY: You first have to get the report.

MR. STREETER: We have the report, very, very recently.

BY MR. FRAWLEY: How did you get the report?

MR. STREETER: Well, I have seen it. As I understand it,

it has been available to the Province, and we have briefly had a chance to glance over it.

BY MR. FRAWLEY: You have seen it in the hands of the Province?

MR. STREETER: Yes.

Q That has not been sent to you as an operator?

A Yes.

Q By whom? By the Department at Ottawa?

A No.

BY COMMISSIONER McLAURIN: What Mr. Streeter is saying is that the Provincial Department have the Stevens report, and you have had access to it there?

MR. STREETER: Yes.

BY COMMISSIONER MORRISON: I think that is quite satisfactory, Mr. Streeter.

BY MR. WADE: Is it the attitude of the New Brunswick Government that we should do everything in our power to provide Canada's coal needs?

DR. ROWLEY: That is from the standpoint of any discoveries that might result from this drilling and geological work that is mentioned?

Q No, simply that whatever we can do we should do to provide Canada's coal consumption?

A I think that is definitely the attitude of the Government and of all who are here, that anything that can be done should be done.

Q Any assistance to the industry is justified on the assumption that we need Canadian coal?

A Yes.

Q Then you would agree that we should attempt to obtain maximum production of coal in New Brunswick?

A Insofar as a larger Canadian market is concerned, yes.

BY COMMISSIONER MORRISON: If the market is available?

BY MR. WADE: Now in your clause 4 on page 48 you refer to the

market having to be assured before you open up new mines, that is before you increase production?

A Yes.

Q Has the Provincial Government any suggestions to make as to how that market can be assured? Has it any suggestions to make to the Commission as to how New Brunswick coal production can be increased and a market found?

A I think the line of thought that is presently being followed is that related to the study of coking and the use of coke and any beneficiation which might enable coal to be used domestically. I recognize, as Mr. Taylor indicated yesterday, that there is objection to the use of coke pretty generally in New Brunswick, but that is true wherever coke has been tried on a new user, I believe, and with the passing of time and greater knowledge of how to use coke it has been accepted in many areas as a very satisfactory fuel.

Q On page 45 it is stated by Mr. Justice Archibald that the operators have made no concerted effort to increase sales. Well now, is it the intention of the Provincial Government to leave the question of getting assured markets and pushing sales up to those operators who have made no effort to increase their sales?

A No, I think what I have just said is that the Government's feeling is if anything can be done we will work in that direction.

Q But you have no concrete proposals?

A Not at this time I have not, apart from what I have mentioned regarding the study of coking and beneficiation of coal that might make it more attractive domestically.

Q And you don't envisage much increase in sales outside the province, that is in Upper Canada?

A Well, the question of transportation is one --

Q The same as with Nova Scotia?

A Yes.

Q And you have not any concrete proposals to make in that

regard?

A No, I have not.

MR. EVANS: This question brought up again as to the operators having made no concerted attempt, I think it was?

DR. ROWLEY: That is what he said, I think.

MR. EVANS: Well now, it is already pointed out in our brief our total sales in the district have increased from down below 100,000 tons to over 500,000 tons. I think that is the answer. We have been criticised for the large number in administrative positions. This matter of coke in domestic use is going to require a sales force. We can go to a pulp company who use a hundred thousand or more tons of coal a year and we can sell perhaps in a very short time 10, 20, 30, 50 thousand tons of coal, and in the same time we would sell two or three carloads around to dealers. Our administrative force would have to be increased and expense would be increased. That is something that should not be lost sight of.

BY COMMISSIONER MORRISON: The central selling agency would take care of that.

MR. EVANS: If it goes into all that detail --

BY COMMISSIONER MORRISON: You might lend them some of this force that is talked of in this report.

MR. EVANS: A good many of them have been added during the war to make out Government reports.

BY MR. FRAWLEY: The difference between the view expressed by the operators and the view expressed otherwise is pretty clearly before the Commission?

BY THE CHAIRMAN: Yes.

MR. EVANS: While I am on my feet I just want to mention two recommendations, numbers 6 and 7: "That a Federal-Provincial survey of water conditions in and around the mines be made," and "That an extensive programme of diamond drilling in the Grand Lake Basin sponsored by the Federal and Provincial Governments be undertaken." I would say that personally I am very strongly in favor of that. I think I can speak for the

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members of our Association that it is what should be done. This water problem is a serious problem and adds much to the cost of coal, and not having information enough about the seam before we lay out our workings is another added cost which can be readily understood.

R. J. FANJOY. Examined by Mr. Frawley.

Q You are the representative of the Rothwell Mine Workers Union?

A I am representing them; I am not a member of them.

Q What is your occupation?

A I am a lawyer.

Q From Fredericton?

A From Minto.

BY COMMISSIONER MORRISON: Are there any members of the Rothwell Miners' Union present?

A The president is here.

Q And anything you can't answer he will?

Mr. Fanjoy tenders

Exhibit 80 - Submission of Rothwell Mine
Workers' Union, Rothwell,
Queen's County, N. B.

MR. FANJOY: I may mention in this case the brief has been dealt with quite fully by the Operators' and the Government's briefs. At the time the Union were preparing theirs they did not know what the others contained, and as it stands the only question they are interested in is on page 2, Wage Conditions.

BY MR. FRAWLEY: I suggest instead of reading the whole brief Mr. Fanjoy may call the Commissioners' attention to anything.

MR. FANJOY: On page 2 under "Wage Conditions". That is about the only paragraph. The others have been dealt with quite fully by the other two briefs.

BY THE CHAIRMAN: You can read that paragraph. The whole brief will appear on the record.

MR. FLNJOY proceeds to read paragraphs of Exhibit 80, which follows:

MEMORANDUM RE CONDITIONS AND SUGGESTIONS OF THE
MINTO COAL BASIN OF THE PROVINCE OF NEW BRUNSWICK

The Minto Coal Basin is the principal coal area in the Province of New Brunswick, and when referring to the Minto area, should also mean to include the Chipman area, when referred to herein.

A check of the records at Fredericton, and other plans, one will find that extensive drilling has been done in some localities, and others have yet to be examined to determine the extent of coal available. However from the evidence available, it is certain that there is reserve enough sufficient to warrant the planning for the mining of coal several years. It also will be noted that the better seams have been worked out, and the effect is that the cost of production will be greater, and the work entailed harder. It may be in order to mention here that there is an extensive revenue, derived from the coal mines of this area, and also affords employment to several families, and thus is worthy of careful and cautious consideration, whereby the industry may be developed in a prudent and economic manner, to the interest of the district as a whole, and the country in which is being served.

Within the past few years two distinct classes of mining is being used for the removal of the coal, one known as shaft mining, and the other strip mining. In the former the coal is removed by means of a shaft, sunk from the surface to the coal seam, then what is known as a main level and off from the main level several by-levels are worked, and it is in this class of mining that the miner is employed. It is felt that at the present time shaft mining is being neglected, and that more consideration should be given to the planning and development of shaft mining and the sinking of new shafts in areas where the coal seam is of a greater depth. It is

possible that this condition has resulted from the number of miners who have left the area since the outbreak of the world war, but we submit should receive careful consideration in the planning of the post war period.

The second class of mining, the work is practically all done by the use of machines, and the experienced miner is not employed. The earth is removed down to the coal seam, the seam removed, and the soil left in the same condition as when removed, the effect of this is to ruin the soil forever, whereas in the shaft mining the soil is not interfered with at all, or only to a small extent. It is submitted that in the strip mining a more strict supervision and control should be maintained by the Department, when the area affected is on land of a private individual. It is true that the operator is obliged to pay land damages, but it may be in some cases, that the private land owner does not wish his land ruined, or left in the condition in which is noted in this class of mining, and also the decreasing of the valuation of the Parish and County rates, but at the present time there is no strict manner of control over any such lease or license holder, if he so desires to strip the ground.

WAGE CONDITIONS

In order to have a complete picture of the area, it is necessary to look back for a period of five years and review the wage conditions, and see the remuneration received by the miner for his services.

In 1940 the rate of wage paid to the miner working at the coal face, was \$2.00 per ton, from this he had to pay for his explosives, and provide his own tools necessary to do the work. This rate continued down until the cost of living bonus came into effect as a war measure, then in September 1943 a general 20% increase was given, and again in December of the same year another increase of \$1.00 per day, and a week's vacation with pay came into effect. The vacation was based

upon a half day for every twenty-three days worked the previous year. To enable the employers to meet these increases, a programme of subsidy assistance was introduced and carried into effect by the Dominion Government, in order that the work may be carried on, at the price of coal now prevailing.

It is submitted that the present scale of wages should be maintained, in the post war period, and further that the miner, should not be expected to work a longer period than eight hour day, and a five day week. With this being adopted it is felt that a more regular crew may be depended upon.

In order to carry out this programme it will be necessary that special consideration be given to determine a method, whereby the employer can pay the wage, and at the same time have a reasonable return for his invested capital. To this end the question of supply and demand, and the marketing and grading of coal may be considered.

SUPPLY AND DEMAND

It must be admitted that the grade of coal produced from the Minto Basin is inferior to the grade in Nova Scotia coal mines, and thus its use is limited to factory, locomotive and plant use, in particular, and when screened may be used for domestic use. It can readily be noted that some concessions must be given, and some special efforts made, both by the employer and employee, to offer a better grade of coal than is offered at the present time.

It may be in order to mention, that the screening of the coal, could provide assistance for the grading of the product, so that in the shipping a proper grade could be forwarded where best suited. It is also suggested that the management and the Union officials might very well get together, in the grading of coal, and cooperating in having less bone and mud mixed in the boxes, thus a cleaner and better article offered for market.

Another fact that is evident, and applies to a portion of the mines, is that only a portion have access to the ship-

ping on the Canadian National Railways lines, unless the coal is taken by C.P.R. to Chipman and transferred over to the C.N.R. a distance of about sixteen miles, and the extra charge being about thirty cents a ton. Thus it is noted that the mines affected in this respect cannot offer for sale to points where the C.P.R. does not operate, without incurring the additional expense. If it were possible to have some arrangements made whereby the cars could be transferred over at Minto, without the extra expense, this would assist in the marketing by the employers affected by the same.

The coal can be used in the two railway systems, and some effort should be made to obtain the market from both of the railway systems for their own use. To accomplish this aim it may be necessary to offer a cleaner grade of coal for the railway use, and with more co-operation between management and employees or their Union heads, this could be to a great extent overcome, than at the present product offered.

In the marketing of the coal, may we suggest that a Central Agency be set up, with the object of placing a certain grade of coal to the place where it is most suited, and could be used satisfactorily, this should assist in the increased demand for the Minto coal, and command a better price as the result.

In conclusion, we feel that no employer should be expected to operate at a loss, and further that he should have a return for his capital investment, but if the Minto coal mining industry is to be maintained, it is necessary that some plan be adopted, whereby the present standard of wages be retained, and if this cannot be worked out by market conditions, and the grading of the product offered, then assistance is necessary in some form.

It is therefore submitted, that in the planning for the post war period consideration be given and steps taken to deal with the present necessary items as follows:

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- (a) Maintain the standard of wages, to assure miners a return for their services.
- (b) Co-operation between the Management and Union officials, to adjust grievances, and any question concerning differences.
- (c) Strict examination of the coal before being shipped.
- (d) Control by the Department of Lands and Mines over strip mining to protect the private land owner and land valuations.
- (e) Efforts be made to induce the two Railway Systems to use more of the coal.

ROTHWELL MINE WORKERS' UNION

(Sgd.) Adam Andrews, President
(Sgd.) George Andrews, Secretary

BY COMMISSIONER MORRISON: This paragraph that you read said in September 1943 a general 20 percent increase was given.

MR. FANJOY: That was by order of the National War Labour Board.

Q Was it voluntary?

A Oh no, an application was made to the National War Labour Board for a 20 percent increase.

Q By whom?

A By the Rothwell Mine Workers' Union, and I believe the U.M.W.

Q Would you give us the date of the Rothwell Mine Workers' Union application?

ADAM ANDREWS: I can't give you the exact date.

MR. FANJOY: I believe it was around February or the first of March it was prepared.

MR. ANDREWS: It was first taken under consideration on the 26th day of February.

BY COMMISSIONER MORRISON: "And again in December of the same year another increase of \$1.00 per day, and a week's vacation with pay came into effect." How did that come into effect? I am talking now as far as this Rothwell Mine Workers' Union is concerned?

MR. ANDREWS: We had an application in for the \$1 a day and the U.M.W. had one and theirs came up first, Ours was paid,

through our application being in.

BY COMMISSIONER MORRISON: What was the date of your application?

MR. ANDREWS: I haven't that here but I think they were some time around the same time.

Q Did you appear before the National War Labour Board?

A No, we did not. We did on the 20 per cent increase. The U.M.W. didn't. We didn't appear on the grant of \$1 a day and they did.

Q And this question of \$1 a day and a week's vacation with pay, did the Rothwell Miners' Union ask for a week's vacation with pay?

A Oh yes.

Q That is in your application? Have you a copy of the application?

A I haven't it here.

Q Could you file one with the Commission?

A Yes, I can.

Q And in that application the Rothwell Miners' Union asked for a week's vacation with pay?

A That is correct.

Q And that had been granted the other coal miners in Canada before you ever made your application?

A I believe it had been granted in Nova Scotia. Really the main start was in the reports from Alberta and you know something about that.

Q I know a little about it. "It is submitted that the present scale of wages should be maintained in the post war period." What do you mean by that?

A Well, the scale of wages before these increases came into effect and before the war were out of all reason.

Q I think so. In fact they were rotten?

A They were rotten. Everything was rotten.

Q But the Rothwell Miners' Union have more ambition than just that the present scale be maintained? Aren't they aiming

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for something even better?

A Well, I might say we have an application in to Ottawa now for another increase.

Q So when you say that the present scale should be maintained you are not serious about that?

A No, but we don't want wages to deteriorate like they did before.

Q No, but you have more ambition than to say that you should be tied down to the present scale? You really want more wages, don't you?

A Yes, we want more.

Q Now you say, "In order to carry out this programme it will be necessary that special consideration be given to determine a method." What do you mean by special consideration?

BY THE CHAIRMAN: Government assistance, I suppose.

MR. ANDREWS: Yes, I think that is covered pretty well in the Government brief and the brief by the operators.

BY COMMISSIONER MORRISON: And further down on line 3, "a reasonable return on his invested capital." What would you consider a reasonable return?

MR. ANDREWS: That is something I don't understand very much about. There is certain rates of interest or return that is more or less considered satisfactory.

Q You wouldn't give it priority over a decent wage, would you?

A Let me see now. I would say the thing should be on equal basis. Wages should be on the same basis as return to capital. If capital gets reasonable return, labor should too.

Q What would you regard as a reasonable return on capital?

A That is something I am not prepared to say.

Q If they weren't paying a decent wage you would say they weren't entitled to any capital return at all, would you?

A Well, I think provision should be made where there could be reasonable return for both.

Q I am assuming they are not paying a decent wage?

- A As far as the Union is concerned we are interested in labor.
- Q And you place human rights ahead of property?
- A Yes, but we believe in a fair deal for all concerned.
- Q But you are not prepared to say what that fair deal should be?
- A I don't know what you mean. I believe a laboring man should get a reasonable wage for his work. If a man invests a lot of money building up his plant and equipment he should get a reasonable return on his investment.
- Q I am just wondering about the order of it if he can't do both?
- A If he can't do both, from a labor standpoint we are interested in the labor end of it.
- Q Further down you say "some assistance should be given". You have reference to subsidies and subventions and that sort of thing?
- A Yes.
- Q How long has this organization been in existence?
- A I think it is 1939, I am not sure exactly of the date.
- Q Do you think there is room for two labor organizations in the Minto coal field?
- A Well, I don't see any reason why there isn't.
- Q You must admit that the other has more strength as a bargaining unit?
- A Well, I don't know very much about their bargain. We get along all right. There is no arguments.
- Q The two organizations are friendly?
- A Yes.
- Q You didn't hear the evidence yesterday, how all the operators were under one organization?
- A Yes.
- Q It appealed to you as being a pretty nice arrangement?
- A Well, it seemed to be all right, yes.
- Q And that being so no doubt you will go back and tell the Rothwell boys the coal operators are organized as one to look after their own interests?

A Well, they always did that more or less.

Q So if it is good for the coal operators to have that sort of a set-up it wouldn't be a bad arrangement for the coal miners?

A Well, that is a matter of a workman's opinion and privilege. We have the organization there; it has been there for quite a while.

Q Are you affiliated with any outside body?

A The New Brunswick Federation of Labour. We were affiliated with the All Canadian Congress of Labour.

Q And you are now affiliated with the New Brunswick Federation of Labour?

A Yes.

Q And you surrendered your charter rights to the All-Canadian Congress?

A Oh yes.

Q You will admit that had it not been for the efforts made by the larger organization that the Rothwell Miners' Union would not have been enjoying the position they do today with respect to wages at least?

A I don't know as I would. I agree that as far as conditions and wages are they had as much to do as anybody else, but it is not a matter for quarrelling between the two Unions. If you have two Unions there is two ways of getting at a thing.

Q Did you initiate any of those improvements yourselves, the movement for the \$1 a day?

A Well, when we initiated that \$1 a day we did not know that the U.M.W. had an application in, but we did initiate that 20 per cent, but that doesn't make any difference. I don't see why it should be overhauled.

Q I am interested. I never heard of the Rothwell Miners' Union until yesterday.

BY THE CHAIRMAN: And you found out it is the only organization that has a closed shop in the whole of these Maritime

Provinces.

FRANK GUSS: You said ---

BY THE CHAIRMAN: This is not going to be any quarrel between the Rothwell Union and the U.M.W.

BY COMMISSIONER MORRISON: I didn't carry on any quarrel with him.

BY THE CHAIRMAN: I am not talking about you.

BY MR. GUSS: You said here to the Commission that the U.M.W. was not present at the hearing of the 20 per cent increase on wages?

A I said we did appear on our application.

Q You said the U.M.W. did not appear?

A No, they did not appear when our application was heard. I don't know why this is being brought out. There is no sense in it.

BY COMMISSIONER MORRISON: That is not for you to say.

BY MR. GUSS: That was not my meaning at all because we certainly did appear before the National War Labour Board on the 20 per cent increase of wages.

FRANK GUSS. Examined by Mr. Frawley.

Q Are you a board member of District 26?

A Yes sir, sub-district 7.

Q And you are appearing here to present this submission on behalf of the United Mine Workers?

Exhibit 81 - Submission by Sub-District No. 7,
United Mine Workers of America

MR. GUSS proceeds to read Exhibit 81:

This Sub-District of the United Mine Workers of America wishes to welcome the Commission and hopes that it will be the means of finding a solution to our problems.

Though our Sub-District supports any general proposals that may be made or have been made by our District Board, the Minto coal field has certain special problems requiring special treatment.

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Our coal field is worked by six major operators together with some smaller ones. The Minto Coal Company is the largest operator in the sense that it holds the biggest area of coal in lease from the Provincial Government. This Company holds a lease for approximately 80% of the known coal. The remaining 20% of the coal is leased by the remaining five operators and many small "one-man" concerns.

The situation peculiar to Minto is that the Minto Coal Company while it refuses to work the area it holds in lease (except for a negligible portion), at the same time refuses to sub-lease or to sell the areas it is not working. This has had several consequences.

In the first place Welton and Henderson (another operator) has mining machinery standing idle simply because it cannot lease an area of coal having a seam thick enough for its machinery. Such coal is however possessed by the Minto Coal Company.

I may quote here my reason for mentioning the above company here was first they were running out of their lease that the machinery was able to operate. Before moving the machinery I got it as a fact that this company has offered to buy or sub-lease a concession from the Minto Coal Company, which they refused them. While the machinery was operating in 1938 and working a longwall system this company produced per man-day $3\frac{1}{2}$ tons. Secondly, before we wrote this brief we didn't know that there was certain concessions made between Miramichi Lumber Company and Minto Coal Company. As I understand now, the Minto Coal Company has sub-leased some to Miramichi Lumber Company. Therefore we were trying to call attention that if that company could buy or sub-lease and have production maintained at $3\frac{1}{2}$ tons per man-day it would be a good thing. Secondly when they had to remove their machinery and it had to stay in the blacksmith shop they went into operation and their production dropped from $3\frac{1}{2}$ tons per man-day to 1.2 per man-day.

The first of the year was a very dry one, and the crops were much injured. The weather was very hot, and the crops were much injured. The first of the year was a very dry one, and the crops were much injured. The weather was very hot, and the crops were much injured.

The second of the year was a very wet one, and the crops were much injured. The weather was very cold, and the crops were much injured. The second of the year was a very wet one, and the crops were much injured. The weather was very cold, and the crops were much injured.

The third of the year was a very dry one, and the crops were much injured. The weather was very hot, and the crops were much injured. The third of the year was a very dry one, and the crops were much injured. The weather was very hot, and the crops were much injured.

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The sixth of the year was a very wet one, and the crops were much injured. The weather was very cold, and the crops were much injured. The sixth of the year was a very wet one, and the crops were much injured. The weather was very cold, and the crops were much injured.

MR. GUSS continues brief:

In the second place, the Minto Coal Company itself cut down mining operations in July 1944 when it closed its West Slope and thus deprived one hundred and fifty men of work, and we believe that if Welton and Henderson would have been able to buy or sub-lease a portion of the coal lease from the Minto Coal Company they would therefore have been able to keep their machines in operation and employed the majority of the men laid off by the Minto Coal Company.

BY THE CHAIRMAN: Is this Welton and Henderson operating now?

MR. GUSS: Yes sir, they are operating in a small seam. When they laid off this 150 men I presume they re-employed some in sinking a shaft, but the majority of men was trying to find work in different mines in the area, of which they had to pay the cost of their own transportation, and of course the other operators could only employ so many of them. The rest we had to send into the lumber woods.

(Continues brief): Though a total tonnage from the area of about 334,503 yearly is now being obtained with the help of the Minto Coal Company strip mining, this will come to an end in about a year's time. At this time production will probably drop to about (we are not certain what it will drop to, but stripping gives 6.1 tons per man-day so the item could be figured out), and apparently the Minto Coal Company has no intention of developing its coal and providing work for our men from Overseas, of whom we have 453.

This number was obtained from Selective Service for Minto and Chipman area. (Continues brief):

.... or for the men thrown out of work by the abandonment of strip mining, and the termination of the leases of the other operators.

In the third place the present system of mining by many small operators is extremely wasteful and may seriously interfere with future orderly and efficient working of the coal area.

Our contention is that the area presently leased by the Minto Coal Company should be operated by a group of not more than three operators who will be prepared to provide maximum production and maximum employment.

We would also like to bring to the attention of the Commission that if a coal washing plant was built in Minto to clean the coal properly that it would facilitate the selling of the Minto coal.

No operator in the Minto area with the exception of one has a washhouse such as every colliery has in Nova Scotia.

BY THE CHAIRMAN: What is the one?

MR. GUSS: The Minto Coal Company have one. It is not in operation as the operation of their mine area is too far away for them to be able to use it.

BY MR. EVANS: Who has that washhouse now?

MR. GUSS: The Minto Coal Company has one.

BY MR. EVANS: There is one being operated. Who has that?

MR. GUSS: Rothwell Coal Company.

BY MR. FRAWLEY: But you were talking about washing coal?

MR. GUSS: No, I finished that.

BY MR. FRAWLEY: Please follow the brief for a moment.

You spoke about the fact you think it should be operated by the three operators, and then you went on to speak about washing coal. What was this about Nova Scotia?

MR. GUSS: The collieries in Nova Scotia have washhouses.

BY MR. FRAWLEY: I was supplied with a two-page document. That is not what you are reading now. That is not very important but we should have copies of what is being read. It explains the difficulty I was in a minute ago.

MR. GUSS: That is in the brief.

BY THE CHAIRMAN: You skipped two paragraphs. You didn't read: "All these are matters that we request the Commission to investigate through its engineer or other expert.

"There is one further point we wish to draw to the attention of the Commission."

MR. GUSS concludes brief:

This is an intolerable situation for our men who are forced to return home without washing and in dirty clothes.

MR. GUSS: That is a matter about which we feel very strongly indeed.

BY THE CHAIRMAN: There is only one question I was going to ask you. You say 150 men were let go from a mine down there. They were miners and many of them were by Selective Service sent to the lumber woods and other places?

MR. GUSS: Yes.

BY THE CHAIRMAN: That to me looks rather peculiar--I don't mean your statement does--in view of the fact that we are told that the operators down there have not sufficient men at the present time to operate their mines.

MR. GUSS: As far as our community was concerned the Minto Coal Company was unable to employ any on account of the forest fire and their shaft house had burned down and they were sinking a new shaft and they were unable to hire on any new employees.

Q But at the present time the Commission is given to understand that their employment force down there is short.

A Well, at the present time not the collieries I know of. Welton and Henderson has a big force; in fact I think they have more men than they need; and Avon Coal Company is not employing men, and G. H. King, I called up and asked him to employ one man and he is pretty well filled up.

BY THE CHAIRMAN: Well, we got the impression from the operators' brief that there was a shortage of man-power down there.

MR. EVANS: I haven't got all the employees I need.

BY THE CHAIRMAN: Why don't you get after Selective Service to move these miners back from the lumber woods?

MR. EVANS: We think so.

MR. TAYLOR: That output of $3\frac{1}{2}$ tons per man-day mentioned

in that brief, that seems extraordinary. I have had access to a good many figures in the Minto district. I would like to know how those figures are made up?

MR. GUSS: Well, the figures were made up by the Company itself.

MR. TAYLOR: What factors were taken into consideration? Just the underground miners?

MR. GUSS: No, all employees.

MR. TAYLOR: Before that is read into the record, as President of the Association I would like to have that matter clarified. I would like to see how those figures are made up.

BY MR. FRAWLEY: Would you file with the Commission the figuration which resulted in this figure of yours?

MR. GUSS: 3.5? Yes sir.

BY MR. FRAWLEY: File in a memorandum the material you used?

MR. GUSS: I will see that you get it.

MR. TAYLOR: Did Welton and Henderson carry on a stripping operation that year?

MR. GUSS: No, not to my knowledge, and I think the representative of the Welton and Henderson Company should give that information to this Commission.

BY MR. FRAWLEY: It arises out of your brief, so that you can get the information from Welton and Henderson if you wish to. Will you file with the Commission the basis, your working papers?

MR. GUSS: Well, the basis that resulted in my figure was that the longwall system was operating and kept on operating steadily every day.

MR. TAYLOR: What year was that?

MR. GUSS: 1938.

MR. CONNORS: I have listened to Mr. Guss' brief. I am not prepared to set a day that our output was up to $3\frac{1}{2}$ tons per man-day; I think he is a little high myself; but I venture

to say when we were operating machines in the Black Diamond area our output was over 2 something per man-day. Where Mr. Guss got his figures I don't know. I haven't come up here prepared with figures from the Company but I know when we operated the Black Diamond the output was higher than the present seam we are working on.

MR. GUSS: I got it from the manager and owner of the company, Welton and Henderson, that's where I got it.

BY COMMISSIONER MORRISON: Will you get him to certify that statement, and supply it to the Commission?

MR. EVANS: Mr. Guss refers to Welton and Henderson, the particular area in which they are now working as being more difficult to work than the Black Diamond area. I would like to ask, to his knowledge are there any other mines that have been working in that same vicinity and same size of seam in years gone by?

MR. GUSS: With machinery?

MR. EVANS: No, just working.

MR. GUSS: Mr. Baird is working the property now.

MR. EVANS: No, I mean where Welton and Henderson are working now?

A You made your statement on that yesterday.

Q I am asking you if you know, are there any more operators in that particular vicinity in the same kind of working conditions?

A Yes, there are. There is the Avon and Rothwell Coal Company, to my knowledge, which tried to operate machines and was unsuccessful.

MR. GUSS: I made a statement here yesterday in connection with datal rates paid between Nova Scotia and New Brunswick miners. I have here both contracts of Dominion Coal Company and Old Sydney Collieries. I am just going to take two figures to point out the difference in the pay. The surface workers in the Minto area, datal rate \$5.19 generally.

The first part of the paper is devoted to a general discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The second part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The third part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The fourth part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The fifth part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The sixth part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The seventh part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The eighth part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The ninth part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe. The tenth part of the paper is devoted to a detailed discussion of the problem. It is shown that the problem is of great importance in the theory of the structure of the universe.

BY COMMISSIONER McLAURIN: Now give us the corresponding figure for that kind of work from Nova Scotia.

A \$5.67. Underground rates, generally the miners receive \$5.55 in our collieries. For the same work in Nova Scotia they receive \$6.05.

BY COMMISSIONER McLAURIN: I don't know enough about this. Aren't there a variety of pays underground?

BY COMMISSIONER MORRISON: Yes. Those are two fairly general rates.

BY MR. FRAWLEY: Would you file with us the agreement between District 26 and the Minto operators?

MR. GUSS: I think so.

MR. EVANS: I may say that the figure given there of \$5.19 doesn't apply to our mine. Our surface men are getting \$5.58 a day. No, pardon me, they are getting 58 cents an hour, which is just a little more than that.

MR. TAYLOR: We would be glad to file with the Commission our rates.

BY MR. FRAWLEY: District 26 makes an agreement with each company?

MR. GUSS: Yes.

Q And they are not absolutely uniform? There are differences in wage rates?

A In our agreements they are uniform.

Q I am speaking of the U.M.W. Your men obtain the same wage for the same work in all the mines?

A Where the U.M.W. is employed, yes.

Q They receive the same wage rate for the same work at all the mines?

A Yes.

Q Then just give me one of those.

BY MR. A. D. KING - In the first place I think I am entitled to know who prepared this brief?

BY COMMISSIONER McLAURIN - You should have asked Mr Guss.

BY MR. KING - I would like Mr. Guss to let me know who prepared this brief?

BY MR. GUSS - I did.

BY MR. KING TO MR. GUSS - Were any of the Minto Coal Company members of the U.M.W. consulted?

A. Yes, the Local 7409.

Q. In the first place in paragraph 3, I would say I admit that the Minto Coal Company has large areas in reserve. We have in the past year probably produced between 40% and 50% of the total output of the district. We have these reserves, and we develop them as occasion requires. In the second place, in the 5th paragraph in regard to Wolton and Henderson, who have machinery standing idle. The Minto Coal Company has three machines and all the equipment necessary to produce tonnage, which we cannot do for shortage of labor.. Wolton and Henderson could use their machinery where they are working today. We are operating in a friable roof and dangerous, and Walton and Henderson have a better roof than we have; and we are operating a machine. I will ask that the Mine Inspector be called up to confirm that.

/ In the second place the Minto Company was accused of closing down the West Slope in 1944 and depriving 150 men of work. At that particular time we were operating two machines and two longwall operations, and shortage of labor got to the point where we could not operate successfully. We removed all those men to another shaft we had. As a matter of fact when we closed it down we had only 153 employed at the slope, and the Union said we let 159 go. How could we let 159 go when we only had 153? We absorbed them all and gave them work; every man that wanted work got it; and they say we left 150 out of work, and our total employees at that time were 153. There is something radically wrong gentlemen when they submit statements like that.

BY MR. FRAWLEY - I think Mr. Guss said he didn't question

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A. D. King

that the Company did find some employment for some of them.

MR. KING - For all of them. Where did Mr. Guss get these figures?

MR. GUSS - I have them here. In 1944 there were 191 members, employees of the Minto Coal Company, in Local 7409. In 1945, in January, there were 101 employees of the Minto Coal Company in the U.M.W. Local 7409, and that is where I took the figures from.

BY MR. KING TO MR. GUSS - Your quotes are all wrong.

A. That is a statement made by the Company.

Q. All right, confirm them.

BY THE CHAIRMAN - I can see where the difference comes in right away. He tabulates his figures on a different basis; 101 men in the U.M.W. in that district.

BY MR. GUSS - He said he only had 153 employees in 1944, and the tabulation shows that there were 191 members of the Union.

BY MR. KING - I might say that if the U.M.W. had come and consulted with me, I would have been glad to have given them all the information they required. To go back to page 2. The U. M. W. don't know anything about our conditions of strip mining at all, whether it will be one, or two, or five years. We have lots of strip operations there and they will continue for a good many years.

BY MR. FRAWLEY - Are the men working there members of the Union too?

A. No. All contract. We do all our stripping operations by contract.

Q. They are not members of the U.M.W.?

A. No. All our strip operations are done by contractors.

BY COMMISSIONER MORRISON - But the excavating of the coal after you have stripped; they are members?

A. Yes.

BY MR. FRAWLEY - After the coal is stripped and you extract it, it is done by Union men?

... No, we simply give this contract at a certain price per ton, a certain price to load the coal in the car, and I don't think any of these fellows belong to any Union. They may belong to a Social Runners Union.

BY COMMISSIONER MORRISON - They don't operate that way in District No. 18, I can assure you.

BY MR. KING - I might say, as I said previously, we have equipment lying there, we have the resources and the development and when these 453 men come back from Overseas we will be very glad to employ them.

BY COMMISSIONER McLAURIN - Provided you can get the market for your coal.

A. Yes. We have the equipment and the resources and we will be very glad to take these men on as they come along.. I don't think I will discuss that query in connection with small operators, that has already been taken care of.

BY MR. FRAWKEY - They were going to take your leases away and give them to three other people?

A. Probably so. Let us live and let live, if they want to give them an opportunity. That is the way I feel about it. With regard to the third paragraph, I have already explained that. We have the equipment for maximum production in the field, if we could get the labor to do it, and the market for it. The coal washing plant has been fully discussed in our brief.

I would like to have something to say about the paragraph - "No operator in the Minto area with the exception of one has a wash house such as every colliery has in Nova Scotia". I am rather surprised that they include that. When we built our West slope in 1932 we built a nice wash house, put in seven shower baths and wash hand basins, but the unfortunate thing was that no one would take a bath. I only know of two men that would take a bath. Hot water at all times. I spoke to one man and asked him why he didn't take a bath instead of going home in his dirty clothes, and he said "My God, I never had a bath in my life". And they took the fittings off of the shower baths and destroyed

the basins, and we had to abandon it.'

BY THE CHAIRMAN - There was no Union there then?

A. All right, we had that thing when the Union was in force.

BY MR. GUSS - Did you have anybody in charge of the wash house?

A. Yes.

BY COMMISSIONER McLaurin - I don't think it will solve the coal problems of Canada as to whether there is a wash house or not at Minto.

BY MR. GUSS - It is a minor being able to change his clothes before he returns home. Is it not a help to his family?

BY MR. FRAWLEY - The Mines Act gives the Minister of Mines the power to compel the installation of wash houses.

BY MR. KING - I would be very glad to institute it again if the men would use reasonable care. I am very glad to do anything for the welfare of the miner.

BY COMMISSIONER McLaurin - That will have to be worked out by the people in Minto. The people in Alberta have them and everybody uses them, and it is obvious that they are desirable.

BY MR. KING - We have not done a great deal, but we have but we have been trying to help out.

BY COMMISSIONER Morrison - You are going into the field we are not acquainted with. I was interested in one reference, I think of the Provincial Government's brief, about a Hospital in Minto, that the Minto Coal Company was making up the deficit.

MR. KING - In the first place we had a very nice building there and we presented it to the Canadian Legion, gave them a free deed of the land and building, and we presented the Town of Newcastle with a lot of valuable land, and we fixed up a building and put up card tables and magazines and a library of 300 books, and someone went in there with an axe one day and broke the thing all up and stole all the books.. Last year I had under consideration a hospital for our own employees, and meantime we had built a new office building and our old building was vacant. I discussed it with some of our employees and they were very favorable, and I said I will fix up a four bed

hospital here. In the meantime the Doctor came in in consultation and he thought we should improve on it. We spent altogether \$15,000. We formed a Hospital Company incorporated as the Minto Hospital Company. All we get is \$50. a month for the building and equipment. We have eight beds, 4 cots and six bassinets for infants. We were glad to do it, but we have to still pay the deficit which runs about \$300. a month, and the Minto Coal Company foots that bill every month. I don't think it is right. We have a wonderful X-ray machine there, and an institution that is a credit to the district.

BY THE CHAIRMAN - If you have any criticism, that would be with the Department of Health.

A. It has been taken up with them. But the Minto Coal Company cannot under existing operating conditions today, continue to pay that deficit. It is an awful drag on us because we don't get any Federal assistance.

BY MR. FRAWLEY - Don't you get a grant from the Provincial Government?

A. No.

BY MR. GUSS - Didn't the Minto Coal Company apply to the rest of the operators in the field, several different companies in Minto to give to that?

A. I did write them all a letter.

Q. Did you get any reply?

A. I didn't get any definite decision on the thing. That was, in the first place, but I feel quite sure that the other operators in the field will co-operate. In the last few years we have all got together pretty well and have adopted a general policy to keep our views in line, and I think we all deserve credit for the way we have co-operated together.

BY COMMISSIONER MORRISON - In answer to Mr. Guss, he asked you if you received any reply to this letter. Did you get any money from them to help out?

A. No.

S.

-1530-

A. D. King

Q. Tangible metallic instructions, perhaps?

A. I might say, today we have got in touch with the different ladies societies in Minto, the Catholic Women's League, and the Ladies Aid, and the I.O.D.E., and they are going to form a Committee and try ways and means of raising some funds to take care of operating expenses.

Q. Before we get too deep in this. Your original investment in the Minto Hospital Limited was \$15,000, and that is your total contribution or investment in that venture?

A. Right.

Q. You receive \$50. a month rental from the Hospital?

A. Yes.

Q. Do they pay it?

A. We transfer it to Minto Coal Company. It is just a transfer of \$50. a month and the Minto Coal Company takes care of the whole works.

Q. Because if they paid that, this Hospital Corporation, it would be equivalent to 4% on your investment?

A. Right.

Q. And no doubt at the time you intended it as an investment as well as a contribution to the community.

A. But the Minto Coal Company is carrying the whole load. We are very glad to keep on paying a portion; it is a wonderful thing for the district. If any man is hurt in the mine you may not be able to get him to Fredericton or Moncton.

Q. I am afraid the people of Minto are taking advantage of your nationality.

A. Probably. I think Mr. Chairman that is all I have to say.

BY MR. CONNORS - May I ask them to clarify a statement in which he said that Welton & Henderson could use machines that are now idle. We left the Black Diamond area in 1939 and moved over to the Southern area and we did install the two coal cutting machines that we have, with the result that the mine was very poor as far as coal production was concerned. We gave them a good test and ran them for 16 or 17 months, but the

characteristics of our two seams being what they are, the seam in the southern area was not applicable to mining with cutting machines. The Avon and Rothwell and Welton and Henderson eventually had to discard the machines, and that is one reason they are on the surface today. At the Black Diamond our production was, of course, higher. He said we could use the machines, but we gave them a fair trial and had to take them to the surface.

BY COMMISSIONER MORRISON - That is a question for discussion at your own Association meeting.

BY MR. KING - On that statement I have made I can call a Mining Inspector. We operate under terrible roof conditions there.

BY THE CHAIRMAN - We want to thank all those who prepared briefs. They took a lot of time to prepare them and they were all valuable briefs; and we want to thank the operators of Minto for their co-operation with this Commission, and also the various Unions down there, and the Government of the Province. We did think that perhaps some of our members could get down to the Minto coal field. I thought it was a bad time of the year and advised against it, but my advice was not taken up until last night. But if there is an opportunity, and I think there will be, some of us, my two friends here at least, I think it would be valuable to the Commission for them to see those fields, and if we so decide we will be back.

BY MR. TAYLOR - As President of the Operators Association, we appreciate having had this opportunity of appearing before you, and I think that goes for the whole community. The very fact of us all getting together, both workmen and employers, I think has been a good thing in itself. Unfortunately this weather precludes the possibility of your visiting the coal fields at this time, but if you are coming back in the Spring, between the operators and possibly the Unions, we will arrange transportation for you from Fredericton Junction, so that you will see conditions underground without any loss of time.

BY COMMISSIONER MORRISON - Thank you Mr. Taylor.

1:10 P.M. COMMISSION ADJOURNED.

1990

Analysis of Run-of-Mine Coal

Location	Proximate Analyses West Bases				Sulphur	R.P.A.	B.T.U. Standard	Moist B.T.U.	Classification ^o	
	Moisture	Ash	Volatile	Fixed Carbon					Class	Group
Tweedie	1.5	17.7	30.5	50.3	7.6	2050	12,055	15,060	II Bituminous	3 High Volatile A
Strip Coakley	0.9	13.8	32.1	53.2	6.8	1970	12,820	14,900	"	"
Strip Higgins	1.0	16.1	30.8	52.1	8.4	2020	12,310	15,100	"	"
Avon 29	1.1	21.2	29.4	48.3	8.2	2030	11,515	15,000	"	"
Kelley W. & H.	1.2	26.1	28.4	44.3	8.4	1970	10,630	15,180	"	"
Yeaman	1.9	11.8	30.9	55.4	5.0	2030	12,845	14,800	"	"
Harvey Melton 10	4.5	18.2	28.7	47.9	8.3	2040	11,355	14,480	"	"
McMann	1.1	17.5	30.7	50.7	8.9	2040	12,100	15,120	"	"
MacDonald	1.2	21.4	28.9	48.5	8.9	2060	11,375	15,040	"	"
Harry Flowers	0.9	22.0	30.6	46.5	11.2	2050	11,300	15,060	"	"
Crawford	1.2	21.0	30.3	47.5	10.0	2150	11,435	15,000	"	"
Banks	0.8	21.8	29.6	47.8	7.9	2040	11,540	15,380	"	"
Average ^{oo}	1.4	19.1	30.1	49.4	8.3	2040	11,775	15,090	"	"

^o Classification according Society for Testing Materials.

^{oo} All of the samples are from the South Minto district except Banks which is located in the Midland District.

Analyses and Classification of Grand Lake Mined Coal^{oo}

	Mois- ture	Proximate Analysis Dry Basis				B.T.U. A.S.T.M. Computed	Classification ^o	
		Ash	Vola- tile	Fixed Carbon	Sul- phur	B.T.U. Standard	Class	Group
West Slope (104)	1.0	15.5	31.7	52.8	5.9	12,911	II Bituminous	3 High Volatile A
Miramichi No.15 (113)	1.0	16.8	31.7	51.5	6.6	12,695	"	"
Black Diamond (112)	0.9	13.6	33.9	52.5	6.2	13,261	"	"
Tweedie Mine (106)	1.6	16.0	31.7	52.3	8.6	12,469	"	"
Kelley No. 1 (127)	1.1	13.0	33.7	53.3	6.4	13,291	"	"
Avon 26 & 28 (107)	1.2	17.1	31.7	51.2	8.0	12,460	"	"
Avon (58)	1.3	15.7	32.5	51.8	7.83	12,622	"	"
Rothwell (105)	1.2	13.9	33.1	53.0	6.9	13,078	"	"
Harvey Welton (121)	1.3	17.2	31.3	51.5	7.7	12,435	"	"
Newcastle (116)	1.0	15.1	32.7	52.2	6.5	12,870	"	"
Myles Slope (118)	1.1	16.9	34.5	48.6	7.1	12,495	"	"
Average	1.15	15.5	32.6	51.9	7.06	12,780	II Bituminous	3 High Volatile A

^oClassification according to American Society for Testing Materials (A.S.T.M.). Computed on a moisture-free and mineral-free basis. See "Coals of Alberta" by Estansfield and A. Lan^r, 1944.

^{oo}Run-of-mine.

Analysis of Screened Coal

-1534-

Size Sq.Hole	Proximate Analysis Wet Basis				F.P.A. Of.	B.T.U. Standard	B.T.U. Moist	Classification	
	Mois- ture	Ash	Vola- tile	Fixed Carbon				Class	Group
Minto Slope	3/4 in.	2.6	19.6	29.7	48.1	5.5	2040	11.770	15,000
Minto Slope	3/4 in.	1.1	14.7	31.4	52.8	6.3	2120	12,775	15,400
Minto 2C	3/4 in.	1.2	17.2	30.7	50.9	6.8	2030	12,405	15,500
Minto 2C	3/4 in.	1.1	15.8	31.4	51.7	6.0	2110	12,685	15,470
Miramichi 16	1 1/4 in.	3.2	18.7	29.3	48.8	7.3	2040	11,680	14,800
Miramichi 16	1 1/4 in.	1.0	21.4	29.1	48.5	8.0	2000	11,575	15,200
Average		1.7	17.9	30.3	50.1	6.6	2055	12,150	
Tweedie	5/8 in.	2.2	14.2	31.1	52.5	8.0	2130	12,550	15,490
Coakley	1/4 in.	1.4	14.0	31.3	53.3	6.8	2020	12,600	15,000
Rothwell	1 in.	1.2	20.2	29.7	48.9	9.2	2050	11,650	15,000
Rothwell	1 in.	1.3	23.2	29.2	46.3	8.9	2060	11,175	15,100
Rothwell	1 1/4 in.	1.2	19.9	30.1	48.8	9.3	2030	11,595	15,050
Avon 29	1 1/4 in.	1.1	19.7	29.7	49.5	8.1	2010	11,725	15,030
Avon 29	5/8 in.	4.3	18.7	28.9	48.1	8.4	2010	11,310	14,400
Avon Strip ⁰⁰	5/8 in.	1.2	16.0	30.9	51.9	8.1	2015	12,325	15,000
W & H Kelley	1 1/4 in.	1.0	25.8	28.1	45.1	8.9	2050	10,820	15,200
Yeaman	1 1/4 in.	1.0	16.7	31.5	50.8	7.5	2000	12,415	15,320
Crawford	1-1/4 in.	1.1	20.2	29.9	48.8	10.1	2020	11,490	15,000
Crawford	5/8 to 1 1/4 in.	1.1	20.0	30.3	48.6	9.2	2030	11,620	15,000
Average		1.5	19.0	30.0	49.5	8.5	2035	11,756	15,010
Newcastle 20	2 1/4 in.	1.0	20.0	30.4	48.5	6.7	2010	11,860	15,320
G. King	5/8 in.	1.1	17.7	33.8	47.4	6.3	2000	12,220	15,250
G. King	5/8 in.	1.0	19.3	33.2	46.5	6.7	1980	12,010	15,400
G. King	5/8 to 1 1/4 in.	1.2	20.1	32.7	46.0	6.1	2030	11,905	15,380
Average		1.1	19.0	33.2	46.4	6.4	2003	12,042	

North Minto district.

Hard stripped coal.

#South Minto district.

@ Midland district.

x Chipman district.

Analyses of Grand Lake Slack Coa.

[illegible]

1890

1891

1892

1893

1894

1895

1896

1897

1898

1899

1900

TABLE NO. V.

Analyses and Classification of Run-of-Mine Stripped Coa.

Proximate Analyses Wet Bases					Classification				
Mois- ture	Ash	Vola- tile	Fixed Carbon	Sul- phur	F.P.A. Standard	B.T.U.	Moist B.T.U.	Class	Group
Soft Coal									
18-Brook	16.8	8.0	29.0	49.2	2.4	2100	11,280	12,390	II Bituminous 3 High Volatile A
Sheffield	19.1	3.4	26.8	50.7	1.8	2800	11,515	12,000	" "
Coakley Lot	12.4	6.7	28.6	52.3	2.5	2050	12,120	13,000	" "
Coal Creek	21.0	5.1	25.3	48.6	1.6	2270	10,380	11,040	" "
Average	16.8	5.8	27.4	50.2	2.1	2305	11,324		" "
Normal Coal									
Coakley Lot.	0.9	13.8	32.1	53.2	6.8	1970	12,820	15,080	II Bituminous 3 High Volatile A
Libbey Lot	1.1	16.3	30.0	52.6	7.6	2000	12,350	15,240	" "
Higgins Lot	1.0	16.1	30.8	52.1	8.4	2020	12,310	15,100	" "
Wisely	1.3	23.7	30.2	44.8	11.4	2000	10,840	14,850	" "
Long Creek	1.2	16.2	32.5	51.3	6.7	----	12,570	15,430	" "
Coal Creek	1.4	20.9	30.3	47.4	10.4	2050	11,320	14,900	" "
Average	1.1	17.8	30.6	50.2	8.5	2008	12,035		" "

ROYAL COMMISSION ON COAL

Vancouver, B.C., March 26th, 1945.

VOLUME XIX

WITNESSES

H. R. Plommer.....	Pages 1537 - 1576
T. A. Horne.....	1577 - 1594
Harold Baird.....	1594 - 1634
T. A. Horne (re-called) ..	1634 - 1637
Patrick S. Fagan.....	1638
John McKellar.....	1639 - 1644
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Vancouver, B.C., March 26th, 1945.

LIST OF EXHIBITS

- No. 82 - Brief submitted by Canadian
Collieries (Dunsmuir) Ltd....page 1538
- No. 83 - Supplemental Brief on Marketing
and Distribution by Cancouver
Island Coals Ltd.....page 1577
- No. 84 - Plan showing properties and
coal rights of Canadian
Collieries in Vancouver
Island.....page 1594
- No. 85 - Map showing coal reserves of
Canadian Collieries
(Dunsmuir) Ltd.....page 1595
- No. 86 - Chart showing estimated coal
reserves, Canadian Collieries
(Dunsmuir) Ltd.....page 1596
- No. 87 - Map of Nanaimo-Wellington area.
- No. 88 - Copy of Wage Agreement, Canadian
Collieries (Dunsmuir) Ltd. and
U. M. W. of A.....
- No. 89 - Map showing surface and coal
leases at Marcoal.....page 1630
- No. 90 - Plan showing coal reserves
at Marcoal.....page 1630
- No. 91 - Submission on behalf of
Cassidy Mines, Cassidy, B.C...page 1639
- No. 92 - Brief submitted by Merritt
Coal Mines Ltd.....page 1644.

ROYAL COMMISSION ON COAL

Vancouver, B. C.,
March 26, 1945.

The Commission convened at the Court House, Vancouver, B. C., at 10.00 A.M. on March 26, 1945.

PRESENT:

Mr. Justice W. F. Carroll, Chairman

Mr. Justice C. C. McLaurin, Commissioner

Angus J. Morrison, Esq., Commissioner

J. J. Frawley, K.C., Commission Counsel

Robert D. Howland, Secretary

BY MR. FRAWLEY: Mr. Chairman, the Province of British Columbia is submitting a brief but I was in touch yesterday with the Minister of Mines and he said they would choose to put in their submission last, so with the Province then out of the way so far as the start is concerned, we will proceed with Canadian Collieries (Dunsmuir) Limited, and Senator Farris is here representing them.

SENATOR FARRIS: I am appearing for the Company.

MR. FRAWLEY: Mr. Plommer, I think, will be the first witness.

SENATOR FARRIS: Mr. Plommer, I understand, has filed his brief and supplementary sales brief, plan of the properties on Vancouver Island and Alberta, plans of the coal reserves, the labor agreement and a portfolio of financial statements, and I understand that you now wish him to read his brief.

BY THE CHAIRMAN: The procedure has been, Senator Farris, that we do not swear witnesses while they are reading their briefs, but when it comes to a question of examination by counsel or anybody else we administer the oath.

H. R. PLOMMER. Examined by Mr. Frawley.

Q Have you filed an official copy of your first brief, main brief?

A Yes.

Exhibit 82 - Brief of Canadian Collieries
(Dunsmuir) Limited

Q You are the general manager of Canadian Collieries (Dunsmuir) Limited?

A Yes sir.

Q In charge of all their operations?

A Yes.

Q And in that capacity you are here today to make some submissions to this Commission on behalf of your Company?

A Correct.

Q Will you proceed then to read?

A Do you wish me to stand?

BY THE CHAIRMAN: No.

MR. PLOMMER proceeds to read Exhibit 82:

HISTORICAL:

The Canadian Collieries (Dunsmuir) Limited was created in 1911 to acquire the properties of the late James Dunsmuir, and the Wellington Colliery Company, Limited, on Vancouver Island, at about the time when, with the opening of the Panama Canal, there appeared to be great promise for a coal industry in the North Pacific, based primarily on the prospects of the deep-sea bunker business, in addition, of course, to the local demand along the North Pacific Coast.

The discovery of oil in California, during the subsequent years, had a severely adverse effect on the venture, not only as to volume of tonnage, but also as to the price of the product, which effect applied to both the bunker and local trade. As a result, after defaulting on bond interest, the Company re-organized in 1920 and the combined capital debt was reduced by approximately 40%, fixed interest was eliminated, and thereafter interest on the reduced bond indebtedness was payable only out of earnings. In 1928 Western Fuel Corporation (operating in and around the Nanaimo District) was acquired. In the fall of 1941 the assets of McLeod River Hard Coal Company Limited, at Mer-coal, Alberta, were purchased and Canadian Collieries extended

their mining operations to Alberta.

At the present time the Company operates two mines in the Nanaimo area, two shaft pits in the Comox Basin, and the domestic mine at Mercoal, Alberta.

PROPERTIES:

We are filing as exhibits general plans of Vancouver Island and the Mercoal District respectively ---

BY COMMISSIONER MORRISON: Perhaps this would be a good time to file them.

BY MR. FRAWLEY: - These maps won't be any use unless we have some way to put them up, some easel.

BY MR. PLOMMER: I was going to have Mr. Baird speak to the plans.

BY MR. FRAWLEY: I think perhaps even at the risk of having Mr. Plommer go over it I am afraid it is not going to be very easy ---

BY THE CHAIRMAN: There is another gentleman going to speak to the plans, he says.

BY MR. PLOMMER: Mr. Baird will speak to the plans.
(Continues with Exhibit 82): whereon the properties owned or leased by our Company are prominently colored.

VANCOUVER ISLAND: General:

On the Island the Company owns or controls approximately 2,687,000 acres of coal rights, and 49,121 acres of surface lands, the bulk of which, it will be noted, is in the Esquimalt & Nanaimo Railway belt. The relation of the surface owned to the coal rights acreage is not important, inasmuch as under the Act, sufficient acreage can always be acquired for mining operations, and the following tabulation summarizes the mining properties:-

	Comox Area	665,000 acres
	T'Sable River to Nanoose Bay Area	355,000 acres
	Alberni Area	162,000 acres
X	Nanaimo-Wellington Area	494,000 acres
	Gulf Islands and outlying Areas	1,011,000 acres
X	This group consists of the holdings of Canadian Collieries and Western Fuel in and around Nanaimo, Wellington and Ladysmith areas.	

During the years, a large part of the timber holdings have been disposed of, but there are still isolated blocks which are held either for insurance against a possible mine timber shortage, or because the stands are awaiting maturity.

It will be noted that there are also two blocks of mineral claims (iron) which are owned by the Company, and which would, if the opportunity presented itself, be utilized in the establishment of an iron smeltery on this coast, particularly if such would be of benefit to our coal mining operations.

Generally speaking, the field as operated to date comprises two very definite districts, commonly referred to as:-

- (1) COMOX - related to the Northern area, and
- (2) WELLINGTON - as applied to the southern zone.

While the coal in both districts ranks as bituminous, the essential difference in the characteristics is that the Comox is a strong coker, and the Wellington light coking to free burning. Further reference to these characteristics will be found under the marketing caption below.

MERCOAL, ALBERTA

At this point we have under direct lease from the Provincial Government 183,991 acres, and an undertaking exists with the Department that all open acreage which lies in the path of our mining operations is reserved to our Company first. The coal is a high volatile bituminous, and is eminently suited for household purposes.

COAL RESERVES:

Mining operations, diamond drilling, prospecting and development, all carried out by the Company itself, indicate that there are reserves of coal in the areas now being worked on Vancouver Island of approximately 6,660,000 tons. These reserves may be taken as being definitely proven, and can be identified in the general reports on coal reserves which are filed herewith as a special exhibit.

That is these plans.

BY MR. FRAWLEY: You don't really mean reports?

MR. PLOMMER: No; in the plans, special plans covering the reserves. (Continues reading Exhibit 82): It will be noted that this estimate is limited to areas now being worked. Attention is drawn on the exhibit to the additional coal reserve classifications:-

Probable tonnage	26,397,000 tons
------------------	-----------------

Possible tonnage	231,220,000 tons
------------------	------------------

and in addition to the districts where these classes can be identified on the plans, there are large coal bearing areas about which no definite information is presently available because no exploration has been done on account of the lack of proper geological maps and surveys. On this point we quote from a report to the Company, made in October, 1928, by Dr. Frank W. Gray, Mem. Inst. Min. Eng., in reference to the Vancouver Island coal field:

"I am not aware of any operating coal area in Canada of comparable importance that remains unmapped as to geology, and until a geological map is prepared and the necessary studies made of your sedimentation, your engineers are handicapped by difficulties arising from the unnecessary lack of information."

As a result of this report, a survey was commenced by Dr. A. F. Buckam of the Dominion Geological Survey in 1939. This survey was interrupted for a short period owing to the outbreak of war, but has recently been resumed. It is more than

probable that this survey will point to the existence of large areas of coal presently unknown or defined.

The exhibit above referred to indicates that the reserves of coal adjacent to the operation at Mercoal are approximately $9\frac{1}{2}$ million tons, with approximately 36 million estimated for the possible class. While there is no definite work to support this latter estimate, the general deposits are so regular, and the occurrence of coal so frequent, that grouping under the "possible" heading is, in our opinion, a conservative classification. In addition to the proven seams, there are known to exist others which have been traced from outcrops, and which are worked at other points in the Coalspur area. These, however, have not been included in our reserves estimate.

Reserves (Accessibility):

Insofar particularly as Vancouver Island is concerned, it should be recorded here that by reason of the severe economic conditions which our industry has experienced during the last two decades, and the more recent pressure to produce for war purposes, development has been allowed to lag. The properties of the Western Fuel Corporation were rapidly exhausted, and by 1940 extraction of all the commercial coal was completed. Elsewhere in the Nanaimo-Wellington area small isolated blocks have been developed and general prospecting is still being carried on, and although the main bodies of the coal (over a period of some 90 years) have been taken, every effort is being made to perpetuate the industry in the district as long as possible.

In the Comox district, the bulk of the reserves are at depth, and drilling is necessary to prove the quantities and extent.

While a limited amount of advance work is carried on to permit of the current mining, no sizeable development or exploration has been done for some years.

At No. 8 Mine, which today is the principal producer, the shafts were sunk and equipped prior to 1914, during which year the pit was closed, and it was not re-opened until 1935.

No. 5 Mine has practically reached its economic limits. Even at No. 8, where within the last five years we have diamond drilled to delimit the coal bearing area, the development is sadly behind and the No. 4 Seam, which under even subnormal conditions should be in operation, has remained undeveloped for the last five years, even although the coal is sorely needed.

We are really living off the development of the past, and until a more favorable manpower situation exists, and there is some assurance of a reasonably peaceful and protected future, we do not hold out much hope for any change from this short range policy.

Nevertheless, for some time past the Company has been actively pursuing exploration and development in the T'Sable River area, where there is a large tonnage of readily accessible coal, and this work is still being currently prosecuted.

BY THE CHAIRMAN: I suppose, Mr. Plommer, we will get some witness who will be able to explain to us just how definite these possible coal reserves are--probable and possible coal reserves?

MR. PLOMMER: Yes sir. (Continues reading Exhibit 82):
OPERATIONS - GENERAL:-

NANAIMO-WELLINGTON DISTRICT:

Douglas Seam:

The principal operation in this district is at No. 10 South Wellington Mine, which is the most southerly point at which the Douglas Seam has been attacked by this Company, and where extraction has been steady since 1937. From the present openings the development was projected to the northern boundaries of the old Granby-Cassidy property, and the coal has been taken from the crop on the right to the extreme commercial depth on the left. The operation has generally been a retreating one since 1942, and in $2\frac{1}{2}$ to 3 years more the extraction will be completed.

The thickness of the seam varies greatly, and the method of operation is the room and pillar system. Mining is done by

contract in this pit, and it is the only operation on the Island where piecework is in vogue.

It has been proven that the Douglas Seam at depth is not mineable for two main reasons, in addition to the general erratic conditions for which this seam is famous. These are:-

- (1) that below the 1100 foot mark approximately, blowout conditions make mining prohibitively hazardous, and
- (2) in the southern end of the field, the coal at depth becomes so poor as to be of no commercial value.

There are, however, outcrop showings in the southern area which, with certain drilling information on file, will probably warrant further exploration, as a result of which it is reasonable to assume that a limited amount of shallow mining may be carried on for a considerable time, and given suitable conditions, it will be the policy of the Company to exploit every fair mining chance.

Wellington Seam:

Since 1941, when a small pocket of coal was defined, (known as No. 8 Timberlands) the extraction of same was rapidly accomplished and this operation was completed in August of last year. In the meantime, by prospecting and diamond drilling, another limited area has been roughly proven, and the mine known as White Rapids is just coming into production. This is, like No. 8 Timberlands, a comparatively isolated pocket, and the drilling records indicate a volume of coal of approximately 500,000 tons, which, at the normal rate of mining, will provide about a five year operation. Of course, if the seam extends beyond the present drilling horizon, the length of the operation, or the rate of extraction, will be correspondingly increased. The seam is thin, and will only average something under 3 feet, and under the old time methods of operation would not be commercial. It is hoped that with mechanized methods, the venture will return a reasonable profit, and the preliminary plans of operation anticipate mining by the longwall method, with the fullest utilization of conveyors on the walls

and in the roadways.

There probably exist other isolated pieces of the Wellington Seam in this field, and as time and funds permit, the work of proving and exploration will be carried on, but at this writing we are unable to record any definite prospects of sizeable Company operations.

• Auxiliary Operations:

In Nanaimo proper the Company operates a coal washery, which serves all the outlying mines. There are also local railway yards and docks. The latter are today used principally for scow loading, although deep sea berths are maintained and all ordinary sized commercial freight steamers can be comfortably accommodated.

Bunkers and open storage space with a capacity of 50,000 tons are also available at this point, and when necessary these facilities are utilized to the full in an endeavor to maintain continuity of mining operations.

COMOX DISTRICT

In the northern area two shaft mines, Nos. 5 and 8, are operated, and these are connected with the wharves at Union Bay by a Company operated railroad 20 miles long.

Both mines are operated on the longwall system and the principal workings in No. 5 are now over two miles from the shaft bottom, and as referred to above, this pit has really reached its economic limits. A daily production of approximately 500 tons, however, is still being obtained, but the operation is no longer a financial success and is being carried on solely to maintain production. There is no future to this mine and as soon as other sources of supply are available it will be abandoned.

No. 8 Mine has a life of approximately 20 years from the present openings. Current operations are carried on only in the upper seam, and although money has been appropriated for development of the lower seam, shortage of manpower has prevented the prosecution of this work. This pit currently

produces approximately 800 tons per day, but properly manned and with both seams being worked, an output of 1500 tons per day should be attainable.

We are diamond drilling in the lower part of the Basin to complete our data for possible new shafts, as within the next few years development on a large scale is imperative if this field is to continue production.

In the T'Sable River Basin, about 5 air miles from the present Comox operations, there is estimated to exist reserves amounting to 9,000,000 tons, and while much of this coal is to the deep, in parts of the area it can be attacked near the surface, and work is in hand now to ascertain the possibilities of an operation which can be commenced without the sinking of deep shafts. It is the hope of the Company that if another 1000 to 1500 tons per day mine can be developed in the T'Sable River District, the opening of the lower Comox Basin might be postponed for 10 or 15 years. In the area where the present prospect slope is being driven, there is estimated to exist, from the diamond drill records, 3,500,000 tons, and if the development work proves up the drilling, this property will be equipped and, at 1000 tons per day, should have a life of 12 to 15 years, during which time plans for exploiting the deep coal, either at T'Sable River or in the Comox Basin, will be formulated.

Auxiliary Operations:

At Union Bay, above referred to, the Company operates deep sea docks, where the largest ships are bunkered. At this point extensive shops are maintained for the benefit of the whole Island operation. There is also an old coal washery which handles the current Comox output, and this plant is being modernized and rebuilt. Three or four years ago a briquette plant was built at Union Bay, but during the most recent years the demand for the small sizes has been so active that the operation of this department has been suspended. As the market

requires, we are now in a position to either briquette excess production of smalls to produce a coarse product, or, on the other hand, we can crush lump and over sized coal to satisfy the demand for stoker coal, and it is surprising how, within the space of a few years, it is necessary to swing from one to the other. We do not always benefit from this process, except for the retention of business connections which we might otherwise lose, but as a result our workers are gainfully employed approximately 100% of the time, of which fact, we believe, they are now reasonably appreciative.

In the Comox Basin we are fortunate in having a hydro electric development which, apart from depreciation or interest on the money, provides the mines with power at a very nominal cost. Our operating margin is small, and we would record here that the cheap power in the Comox field is one of the main contributing elements which makes operation of the coal mines possible at all. We have an installed capacity of something in excess of 10,000 H.P. The upper hydraulic works have all been installed to utilize the full potential on the river, and there is available an additional amount equivalent to that already harnessed.

I might interject there, we have had that hydro surveyed recently and when I say "to that already harnessed" there is probably another 20,000, from the report just made. (Continues Brief):

MERCOAL:

Since acquiring this property in the fall of 1941, we have built the output up from 200 to 300 tons to something in excess of 1000 tons per day. The principal purpose in acquiring this mine was to augment our supply of domestic coal in the Coast market.

As elsewhere, the labor supply at Mercoal has been erratic. Every effort, however, is being put forward to maintain production, but there are no storage facilities at the mine, as there are on the Island, and in common with most all

other domestic coal mines, reduced output or short time will probably be forced on us during the early summer months. The Commission will doubtless hear from the other domestic coal producers in Alberta the manner in which erratic summer operation imperils the capital invested, and creates undue hardship amongst a considerable portion of the men engaged. The McLeod River coal is rugged and will stand storage, and this Company will continue to take advantage of every storage possibility, as it has done for the last year or two, so that a continuity of operation, insofar as is humanly possible, might be maintained for the benefit of all concerned. We hope that if any plan is evolved by this Commission to provide steady operation for the Alberta domestic mines, the McLeod River operation will be enabled to benefit to the same extent as other Alberta domestic producers.

We have not set any mark as to the maximum production from this property, and the market is easily absorbing the current output of about 1,000 tons per day. During the next year or two, and particularly depending upon the effect of the ensuing summer's operations, decision will have to be made regarding future expansion. The capacity of the present surface plant is being fairly well taxed, but if conditions in the market would warrant it, there is no reason whatsoever why this property should not produce half a million tons per year, or approximately 2,000 tons per day; in fact, one could say that with proper plant facilities, there is practically no limit to the physical ability of this mine to produce.

BY THE CHAIRMAN: Under your present development in the Province of British Columbia, Mr. Plommer, have you the present facilities and development to keep up with your production previous to the war, I mean when the war is over?

MR. PLOMMER: We have the facilities, but the development is behind. Is that what you mean, sir?

BY THE CHAIRMAN: Yes, and it will be necessary then, if

I understand you correctly, to open some new development to bring that up to the pre-war output, production?

MR. PLOMMER: Yes. (Continues Brief):

MARKETS:

This section will deal with the outlet for Vancouver Island coals and McLeod River coal separately, although a common sales organization, with headquarters in Vancouver, B.C., directs the entire distribution.

Probably differing from every other producer in the West, the mines of this district have a variety of outlets which, theoretically, is healthy. Yet the balancing of the sales as between different kinds and grades at times is a task which is extremely difficult, and it is only by the most adroit management and, when necessary, the use of our storage facilities, that steady operation is accomplished. The detailed "Analysis of Sales" by grades and outlet, which is filed as an exhibit (That will come in with Mr. Horne's brief) will immediately convey the complexities of our marketing problem, but for the purpose of this brief, our business can be divided roughly as follows:-

	<u>5 Years Ago</u>	<u>Now</u>
(1) Domestic (incl. misc. industries through dealers)	28%	42%
(2) Industrial	11%	26%
(3) Railways	16%	1%
(4) Bunkers	26%	8%
(5) Export	7%	10%
(6) Gas Coal	<u>12%</u>	<u>13%</u>
	100%	100%

We have endeavored to portray in the above breakdown, figures representing something like normal or pre-war years, even though at the present time these figures are widely distorted, for example:-

- (1) The domestic market which would be normally served from the Island mines, is principally represented in

Vancouver, Victoria, New Westminster and Seattle (in other words, the main centres of population on this Coast) but by reason of lack of supply of household coal from Nanaimo, the Island volume to this outlet today is only nominal. This will be partially corrected when the White Rapids Mine and other possible similar projects which may be developed come into steady production.

- (2) The so-called industrial tonnage today is greater than normal because of the failure of fuel oil supplies to the B.C. coastal market, and there are jobs, for example, which are buying coal for stoker equipped steam plants who are even paying lump coal price, plus the cost of crushing. In our opinion, a return to normal conditions, unless our industry is suitably protected, will probably see a return to the use of cheap fuel oil in our most adjacent market.
- (3) In the matter of railways, normally we would supply about 100,000 tons per year, that is to the two main trans-continental systems. Under existing conditions we have been forced (naturally enough) to take care of the essential industrial and heavy heating load on this coast, and what would be a normal railway demand for Island coal is currently being satisfied from the steam coal mines of Western Alberta and the Crow's Nest District.
- (4) At the outbreak of war we were enjoying, with the assistance of a 75¢ per ton Federal Government subsidy, deep sea bunker business to the extent of nearly 200,000 tons per year. This included approximately 50,000 tons to the trans-Pacific Empresses, plus the requirements of those trampsteamer owners who were willing to bunker in the North Pacific. Today this business is practically nil and it is impossible to forecast what the post-war situation will be, or how severe competition will be from other sources of supply. Currently the Federal Government's deep sea subsidy is suspended, and a reinstatement of this assistance will, in due course, depend on conditions at the time. We believe that our product should first be

absorbed in the home market, and would record now that to our mind it is fallacy to subsidize the Vancouver Island industry to enable it to compete against foreign coal and, at the same time, allow liquid fuel to be unceremoniously dumped into that same home market.

- (5) About ten years ago, after having been more or less frozen out of the market in the Puget Sound area by American competitors, this Company acquired a property and established a branch in Seattle which, although a long gamble at the time, has proved to be a really healthy outlet for our coal. During the depression years this business was built up to nearly 40,000 tons per annum, and the volume would have been even doubled during the last few years but that embargoes were placed against the export of Island coal to this market.

We are hopeful that as the pressure of demand eases, we shall be able to re-establish ourselves in Seattle and the other Sound cities, which are within scow haul of our shipping ports and which, in spite of fuel oil and other substitute fuels, still is capable of absorbing a good volume of a high grade domestic coal.

We have included in this summary a figure of 7%, which is based on say a 50,000 ton per annum throughput (that is still talking about Seattle). This is, if anything, low, and we have discounted entirely the Alaskan market, inasmuch as this had practically ceased to exist when war broke out, and the prevailing conditions of the last five years has completed the decline. We normally serve the White Pass & Yukon Railway, operating from Skagway to White Horse, and although this may be classified as export business (because it has to enter through Skagway) we think of it normally as a Canadian railway consumer, and the requirements of this line are not included in this export classification.

- (6) The percentage shown for gas (coking coal) represents something like a normal demand, based on past experience. At the moment, however, the requirements of the gas making

companies are nearly 100% more than what was previously required. Because of a constricted operation, due principally to man-power on Vancouver Island, the volume of the current production allocated to this outlet is even less than normal and, in the meantime, it is our understanding that coking coal from the Crow's Nest is being brought to the coast under some special arrangement.

So while we record for your information and guidance a resume from the records of the past, we must perforce qualify it with the conditions which presently exist, and what will happen in the future is unpredictable. There will no doubt always be a market for Vancouver Island's high grade bituminous domestic coal in the lower mainland of B.C., and as long as artificial gas is required in this area, certainly the coking smalls from our Island properties will be in demand; but beyond this it is difficult to forecast until the local producers have some assurance as to whether, during the ensuing years, they will again have to face fuel oil competition.

This brings us in our brief to perhaps the most vital spot in our existence, and the one concerning which there exists the most violently different schools of thought, and that is foreign fuel oil.

We use the adjective "foreign" advisedly, because if this were a Canadian product we could have little ground to complain. We have contended for years that the Province of British Columbia should not be used as a dumping ground for low grade Californian, Colombian, and Peruvian oil, at any rate, not to the extent that a local, and what would otherwise be a virile, Canadian industry is faced with extinction.

Until about the time of the start of the war there was a theoretical tariff on gasoline of $2\frac{1}{2}\text{¢}$ per gallon, and it was further protected by dump duties, which brought the total protection to somewhere in the vicinity of 6¢ per gallon. Today, of course, all types of liquid fuel (both for internal combustion engine use and otherwise) are under the most rigid Government

control, and our information is that the present duty on gasoline is 1¢ per gallon, and the dump has been suspended for the duration of the war, but that it is necessary to obtain a permit to import.

The basis of the coal producers' argument which follows in the immediately succeeding paragraph is, therefore, not altogether applicable under the present wartime condition, but it is recited at this time to record the experience of the pre-war years, and its effect on the Canadian coal industry, and to suggest that there exists definite grounds for fear by our industry that, in the post-war years, there will be a return to the former conditions.

We have always maintained, and still maintain, that the coal industry of this Province, particularly on the Coast, is victimized, because the oil producers who have a monopoly in the market for fuel for internal combustion engines, namely gasoline can and do by their own admission as was printed in the Imperial Oil Review of June-July, 1934, set their price of gasoline by the price of fuel oil, and the price of fuel oil is set by the price of coal. It was not until May, 1940, that the Chairman of the Coal & Petroleum Products Board of B.C. arbitrarily ordered a reduction in the price of gasoline to the extent of 3¢ per gallon that some sort of correction of this situation was brought about. We contend that the oil producers dump their secondary fractions for use in externally fired steam plants, and for general heating use, to the detriment of our local basic industry, under the cover of a protective tariff on gasoline, and as long as crude oil is allowed to enter Canada duty free, we do not see much hope in the situation. We should record that whereas a 3¢ reduction in the price of gasoline was ordered in 1940, the price was even then only reduced to that in effect at Three Rivers, Que., (a port open only 7 months of the year) whereas B.C. faces the year around the cheapest source of oil supply in the world. After a few days strike by the distributors, this reduction was compromised at 2¢ per

gallon, which has been in effect ever since. But this is not good enough if Canadian industry is expected to prosper and our workers are to have any degree of security.

BY MR. FRAWLEY: When you mention Three Rivers, I suppose you mean it happened that way?

MR. PLOMMER: We just picked that point as being more or less of an unimportant place. (Continues Brief):

In 1932 the Provincial Government put a half cent per gallon tax on fuel oil (exempting railways and certain logging operations) and this has been of some benefit, but while this tax was supported in litigation before the Privy Council, if it were increased to a point where it became prohibitive or protective, it would, no doubt, be re-challenged.

There are other elements which affect the displacement of coal by fuel oil in our normal market, and we refer particularly to the Dominion Forestry regulations which, on Vancouver Island, make the use of coal for locomotives prohibitive. These regulations, we contend, are outmoded and should be revised. Other railways in the northwest have proven that the incidence of forest fires is by no means always attributable to sparks from coal burning locomotives and, in any case, modern spark arresters are now available which minimize the risk from coal, if anything, below perhaps that of liquid fuel. These regulations affect the consumption of coal on the following lines:-

- (1) Canadian Pacific Railway - Kamloops to Field
- (2) Canadian National Railways - Kamloops to Jasper
- (3) E. & N. Railway - Victoria to Courtenay and Alberni

In addition to the above, but not by reason of forestry coal, oil is used exclusively by the Pacific Great Eastern Railway between Squamish and Quesnel.

In the Sales Department's Supplemental Brief, further reference to it is made, with statistics covering imports, consumption, etc., and we request that your Commission give this phase of our submission your most serious consideration.

Reference to sawdust and sawmill refuse must be made in this submission, because, during the last 10 years it has, particularly in the domestic, and to a certain extent in the industrial market, displaced perhaps as much coal as fuel oil; but because this is a product natural to the Canadian logging and sawmill industry we do not feel we are in a position to complain if we are unable to compete. We have withstood sawdust competition now for over a decade, and believe that its effect is lessening. Sawdust is a by-product from sawmilling operations, and while, when the lumber industry is in full boom, there is doubtless a fairly plentiful supply of this fuel, the vagaries of the lumber market are such that it has not proved to be a reliable source of supply for domestic or industrial users. Whereas large consumers such as the pulp mills can plan their boilers for back firing with oil or other alternatives, the household user is left in a sorry plight when the supply fails, as has so often happened in the past. Portland, Ore., was perhaps the home of the domestic sawdust burner, and towns like Bellingham, which are essentially mill towns, have had their lesson in this respect, and by and large, have reverted to the use of a more assured kind of home fuel. Furthermore, the advance of science has indicated that this material can be better utilized for the manufacture of industrial alcohol and other purposes, and we feel that an economic balance will ultimately be established whereby such sawmill refuse as is left in the market will not be so great as to offer too serious competition. We hope that this general estimate of the situation is correct.

McLEOD:

As referred to under the operating section above, this property was acquired to augment the supply of domestic coal from Vancouver Island, and the coal has proved to be a most popular seller, backed, of course, by strenuous sales efforts and considerable publicity. At the present time 90% of the

output from this property comes westward into B.C., and partly of our own volition, and also under direction from the Coal Administration, the markets in Northern Ontario and the prairies were gradually relinquished. While the supply from Vancouver Island is short, the shipment of such a large percentage of McLeod River coal westward is satisfactory, but the distribution is currently one-sided; and outlets northward and eastward from Edmonton, and including Northern Ontario, will no doubt be needed to meet post-war conditions.

At the present time the principal competitor of McLeod River coal within Canada is the product of the Drumheller, Alberta, mines, and these producers are currently benefitting from a 65¢ per ton subvention to get into, and compete in, the Pacific coastal market.

Under present conditions we are not protesting too much, although we do not think that this subvention is necessary even now. Certainly it should be immediately discontinued as soon as the war emergency ceases.

That is the end of our narration, sir.

BY MR. FRAWLEY: Do you want to run over those maps, or do you want Mr. Baird to do that?

MR. PLOMMER: I think he might as well do it.

EXAMINED BY MR. FRAWLEY.

- Q On page 3 you say that the coal both in Comox and Wellington is bituminous, but that Comox is a strong coker, and the Wellington light coking to free burning, then you make further reference to that below. I don't see any particular reference to it but what I mean is this: will you file something with the Commission to indicate just why you say Comox is a strong coker? You have had some tests made?
- A Oh yes, we will give you comparative analyses if you wish.
- Q Just give us a short memorandum from the coking standpoint, everything you know about those two coals and why you say one is strong coking and the other light coking to free burning. On page 6 you say you want "some assurance of a

reasonably peaceful and protected future." Would you elaborate on both those words? First, "peaceful"?

A Well, peaceful from the standpoint of labor, principally.

Q What are your labor relations at the moment?

A Pretty fair.

Q And you only desire to have a continuation, then, of present conditions? That would be satisfactory, would it?

A Well, I wouldn't say they couldn't be improved.

Q But that is the only peace that you wish is peace with labor? You are not referring to your competitors there?

A You can't operate under turbulent conditions.

Q But you are speaking about your own arrangements, not the trade in general?

A Right.

Q Now you say you look forward to a "protected future". Would you explain?

A I think I have covered that in the brief, concerning oil.

Q You have brief reference to protection from oil?

A Yes.

Q If you can be protected from oil you can look after the rest?

A We don't fear any American coal competition; in fact we sell down there.

Q Now on page 7 you refer to the fact that piece work is only in vogue in Wellington No. 10.

A That is a contract mine.

Q Would you mind just explaining that a little bit to the Commissioners? You have no contract workers in any of your operations except at Wellington No. 10?

A That's right. It is the only room and pillar mine we operate, that is primarily the reason, and longwall can be contracted but we have so many rock intrusions and variations in our seams that it is practically impossible to get a basis, so the men prefer a straight day rate.

Q Has that done anything to production?

A How do you mean?

- Q Well, is it just as good that way as if you did have those producers on contract basis?
- A I think they would probably produce more coal if they were on contract, if you could get a contract that would be workable, but if it was the kind of arrangement that you are fighting all the time, why, that doesn't work either.
- Q So you prefer to go along on a datal basis?
- A We have tried all kinds of bases but they don't want contract on longwall.
- Q It is, however, done in other areas?
- A I believe so.
- Q What do you mean by "blowout conditions below the 1100 foot mark approximately, make mining prohibitively hazardous"?
- A A blowout is not an explosion. It has never entirely been proven what causes it; probably gas under pressure; but the seam expands and fills the working places, buries the men; very dangerous. If you would like to discuss that in more detail when Mr. Baird is in the box . . .
- Q Very well, thank you. Now you refer on page 12 to the general state of affairs in the Mercoak district, where there is reduced output in the summer months. Have you any views yourself about that? You are now an Alberta operator. You would like to have the Commission work out a plan to provide steady operation. What do you think about that yourself?
- A Well, I don't know. About all they could do is evolve some plan for production of the coal strung out over the year, rather than all in the winter months, and that would probably involve a subsidy which would work in the summer time and not in the winter.
- Q I wasn't thinking of a subsidy.
- A Subvention, then.
- Q No, nor anything of that sort. You couldn't possibly do it by storing?
- A Pretty difficult.
- Q You say that your coal stores well?

A We will do it to the limit of the storage facilities, but that is about 30,000 tons and then we are stuck.

Q That means more storage, I suppose?

A Sure. I mean the distributors have only got a certain amount of capacity. We leased yards in Greater Vancouver some 10 years ago with that very object in mind and that is probably why we operate more steadily than anybody else.

Q We used to have exactly the same problem in the Turner Valley, and by the same expedient of large storage facilities that field is now on 100% operation. Now I wondered to what extent the producers could do something, if the coal would permit it. What do you think?

A Well, of course, storage at the source, particularly coarse grades, every time you handle coal you lose some, break it up. It is a little different with fuel oil or gasoline or what you are talking about. You put it in tanks; it will stay there indefinitely.

Q I realize it is a problem. I don't want to go to the point of paying something extra to keep the production going if we can solve it by keeping away from the Treasury as much and as long as we can.

A I was thinking that. Large dumps at destination of course is about the only solution.

BY THE CHAIRMAN: How does that work out with your coal? Is it more dangerous to have your coal in large dumps?

A Oh, we can control that.

BY COMMISSIONER McLAURIN: You have had sufficient experience with your Merco coal to determine that it will store?

A Right.

Q And will not suffer too much degradation over a period of time?

A It is not too severe.

BY MR. FRAWLEY: Well, really you should not have any problem of intermittent operation?

A Well, it depends on the capacity to which you want to run the mine.

Q You told the Chairman that to maintain your pre-war output you would definitely have to go into some new production. That is speaking of the Island mines?

A Yes.

Q And that is why you have the T'Sable River and White Rapids operation under way?

A Yes. T'Sable River is only in the prospect stage.

Q Because you feel that after the war you have got to have new production to maintain the pre-war output?

A I know it right now.

Q I don't know that I quite understood. Would you tell us again what you meant on page 14 about domestic market. You say: "By reason of lack of supply of household coal from Nanaimo, the Island volume to this outlet"--that is to your domestic market generally--"is today only nominal," Would you be good enough to just elaborate on that?

A Well, we have had a reduced production to begin with, and the Administrator had diverted what would otherwise be a considerable volume of coal from domestic to industrial outlets. You see "industrial" has gone up from 11 to 26%. In some cases, as I also refer to, we are crushing lump coal for steam plants, which takes it out of the domestic market.

Q It is by virtue of these directives you are getting from Coal Control, that has changed your market considerably?

A Partly.

Q That is what this paragraph means on page 14?

A Yes.

Q Now I am passing over your reference to oil because I want to talk to you about that later when I get a little more information. Now on page 16 it is indicated that you have only increased your supply to the gas company, which is called the

B.C. Electric Company, is it not?

A Yes sir.

Q You have only increased your supply to that market by 1%, from 12 to 13. I wonder if you shouldn't say something more to explain that, because the Crow's Nest coal is coming down here to supply a deficiency of some sort. What are the factors that prevent you from enlarging that market?

A As a matter of fact that percentage is rather misleading. We have not increased the volume at all. The volume is actually considerably less. The percentage is more or less struck by reason of the decreased total output.

Q You really are sending less into that market than you were five years ago?

A Yes.

Q Why is that?

A We are not making it; we are not making the total output we were five years ago.

Q How about production per man per day? Is that down too?

A No, not particularly.

Q In your case that is standing up pretty well?

A I think so.

Q What is it now at each one of your Island mines?

A They vary very considerably.

Q Is that included in the financial information that Mr. Fagan has prepared?

A I think so, yes.

Q But you are just down, and that is why not so much coal is going into the Vancouver gas market and that is why they are bringing in coal from Crow's Nest?

A That's right.

Q You say that that coal is being brought to the coast under some special arrangement. Is Mr. Ewart here? Is there some special arrangement?

MR. EWART: There was at one time. I don't know if it is in effect at the moment.

BY MR. FRAWLEY: You have in mind that there was some help there?

MR. PLOMMER: I say "was informed".

Q It is not a question of the quality of the coal?

A Oh no, not at all.

Q Your coal would satisfy this Vancouver gas market?

A Yes.

Q Have you got a copy of those Dominion Forestry regulations?

It is the Dominion Forestry regulations that keeps the coal out of the locomotives in those areas in British Columbia, is it?

A I wouldn't say so, but those regulations are in effect. They probably want to use the oil anyway.

Q They are in effect just as much along the line of the P.G. as they are any place else?

A No sir.

Q In a word, can you tell us what those Forestry regulations are?

SENATOR FARRIS: Aren't they Provincial mostly?

MR. PLOMMER: I understand they are Dominion.

BY MR. FRAWLEY: I would think they would be Provincial, from the standpoint of jurisdiction alone. British Columbia owns its own forest reserves?

A I don't know whether they do in the railway belt.

Q You make mention of the fact that oil is used exclusively by the P.G.E.?

A Yes.

Q That is because they want to use oil?

A Apparently.

Q You refer on page 21 to a special 65¢ per ton subvention?

A Domestic coal rolling westward pays a \$5 freight or more. About a year ago they put on 65 cents.

BY COMMISSIONER McLAURIN: Has it anything to do with price ceiling? Isn't there such a demand for coal here now that Drumheller coal could come in and command a 65¢?

MR. PLOMMER: Absolutely no reason to cut the price at all.

BY COMMISSIONER McLAURIN: So it is really a price ceiling subvention rather than a subvention to help the operator?

MR. PLOMMER: I can't understand it. It just gives them a 65¢ lower price in the retail market.

BY MR. FRAWLEY: This is the one, P.C. 10592 of 27th November 1942. It is recommended "that assistance be granted to movements of coal from coal mines or coal properties in the Carbon, Sheerness, Drumheller, and Lethbridge areas of the Province of Alberta, as indicated in the list of Coal Mines of Canada, No. 4-1 issued by the Department of Mines and Resources, January 1942, and shipped to points in the Province of British Columbia south of the 50th parallel of latitude to which the tariff freight rate in effect at the time of shipment is five dollars (\$5.00 per net ton, or in excess thereof;

"That with respect to such movements of coal referred to in the above section 1 the assistance granted shall be a sum equivalent to a reduction of sixty-five cents (65¢) per net ton from the said freight rates, the amount of the reduction being payable to the railway which shipped such coal."

That is the principal part of it.

BY THE CHAIRMAN: How does it make for cheaper coal? How can they sell cheaper coal under that subvention if it goes to the railway?

BY MR. FRAWLEY: Because whoever sends out the coal gets that much freight help to lay it down in the Vancouver market; 65 cents less; he has that part of the freight paid for him.

BY THE CHAIRMAN: And do you suppose that whoever is administering this thing are so free with our money that they are going to help an industry of that kind when there is no necessity for it? They can lay their coal down in British Columbia at competitive prices and get better prices for it?

MR. PLOMMER: For 15 years Drumheller coal sold in this market for \$1 a ton more than Island coal. After the adjustment of

the O'Connor award the prices were all levelled up.

BY COMMISSIONER McLURIN: The O'Connor award was in 1943 and you are reading an Order-in-Council dated 1942.

BY MR. FRAWLEY: What was the date of the O'Connor award?

BY COMMISSIONER McLURIN: November 1943. There is no relation between that Order-in-Council and the O'Connor award.

MR. PLOMMER: That was the time they levelled up the prices, after the O'Connor award. That increase was passed on to the public and they levelled up the prices and left this 65%.

BY MR. FRAWLEY: What you are saying is that the Drumheller coal, Carbon, Sheerness, Drumheller and Lethbridge, doesn't need any help; it can get into the market by paying the full \$5 freight rate and meet you out here without a disadvantage?

A That is my opinion. It can be sold. I don't say the public get as good a deal.

Q You are now speaking of the respective qualities of the coal?

A Sure.

Q That to one side, they can enter the market in your opinion without this 65% assistance?

A That is my opinion.

BY COMMISSIONER McLURIN: And you would be quite happy to compete with them with Mercoal coal?

A We are quite happy anyway.

BY MR. FRAWLEY: Mercoal coal doesn't get this?

A No.

BY COMMISSIONER MORRISON: There is no subvention for quality?

MR. PLOMMER: No, but the point in bringing that up, it seems to me that things like that are not fair.

BY THE CHAIRMAN: Absolutely right.

BY MR. FRAWLEY: Your principal competitor is Drumheller coal.

What competition have you got outside Canada?

A We ship our coal out.

BY COMMISSIONER McLURIN: Right into the States? What coal do you meet there?

A Utah and Wyoming.

BY THE CHAIRMAN: I suppose you have no idea what will happen that market after the war? Do you think you will be able to hold it?

A Yes, I think we can hold quite a piece of it.

Q That is what you mean by that paragraph?

(Page 1573 follows)

BY THE CHAIRMAN - I suppose you have no idea what will happen that market after the war? Do you think you can hold Seattle?

A. Yes, I think we can hold quite a piece of it.

Q. On page 15 "At the outbreak of war we were enjoying, with the assistance of a 75¢ per ton Federal Government subsidy, deep sea bunker business to the extent of nearly 200,000 tons per year." Is that in reference to tariff or other assistance?

A. That has reference to Order-in-Council.

BY MR. FRAWLEY - P. C. 2971 of December 1939. It had been something less than that but it was made 75¢, so I presume that is what you are referring to.

BY THE CHAIRMAN That is before the war?

BY MR. FRAWLEY - Yes. "(1) Coal mined in the Province of British Columbia and sold for ships' stores or for export to foreign countries be assisted by payments out of such sums as may be provided by Parliament from year to year for that purpose. (2) With respect to coal mined in the Province of British Columbia and sold for fuel as ships' stores, the assistance granted shall be the sum of seventy-five cents (75¢) per net ton, the amount of the said assistance being payable to the coal mine operators or coal distributors, provided:

(a) The assistance provided on coal sold for ships' stores shall apply only on coal sold for use by vessels navigating entirely in salt water and not for use by vessels operating on inland lakes or British Columbia.

(3) With respect to coal mined in the Province of British Columbia and sold for export to foreign countries, as herein-after excepted, the assistance granted shall be the sum of one dollar (\$1.00) per net ton, the amount of the said assistance being payable to the coal mine operator or coal distributor, provided:

(a) The assistance provided on coal sold for export shall apply to coal exported for consumption in foreign countries other than the United States of America or its territorial possessions."

BY THE CHAIRMAN - For export?

BY MR. FRAWLEY - Yes.

BY THE CHAIRMAN - Does the \$1.00 apply to the United States?

BY MR. FRAWLEY - No.

BY THE CHAIRMAN - Of course I suppose there is no need of looking for the reasons. Why was it necessary for the Government to give that assistance to the bunkering business?

BY MR. PLOMMER - About ten years ago the whole industry was at a low ebb and we sought every way to increase our output and that seemed like the best opportunity, if we could cut the price against British coal we could get them to bunker here. We didn't have so much lock with the foreign owners, but these local charterers who had vessels under time charter would bring them in here under pressure, and finally we got the price down where they would bring the ship in spent instead of full of coal and we got it back up to about 200,000 tons. First it was two bits, but that was no use, and then 50¢, and then 50¢ with \$1.00 on everything over sixty thousand. That is when we got the big lift.

BY MR. FRAWLEY - You say that has been rescinded?

A. The deep sea has been suspended.

BY THE CHAIRMAN - Would that help you to compete with the oil bunkering?

A. It had some effect.

Q. I have been told that there is no bunkering equipment on the waterfront in Vancouver here for coal?

A. When they want to bunker here they use a floating crane, but for fifty years they have not considered it necessary to have bunkering equipment here because they can sail over to the Island and pick it up.

Q. It would be cheaper too? It would be more costly to bring the coal here for bunkering purposes?

A. Right. Cheaper to move the ship.

Q. I think I did hear some little complaint about that, but I don't think there is much foundation to it.

BY COMMISSIONER McLAURIN - You say suspended for deep sea operations. That suspends most of it, does it not?

A. Yes. But tub boats and other craft are still operating in salt water, and it is not suspended with respect to coast-wise vessels.

Q. That 75¢ still covers them?

A. Yes.

BY THE CHAIRMAN - You take the western ships, they don't get the 75¢?

A. No sir.

Q. I suppose it was suspended for the very reason there was very little ocean-wise?

A. No, we didn't need it; we simply put the price up.

Q. Make everybody pay it instead of the few?

A. Right.

BY MR. FRAWLEY - That is all then. I want to recall you on the subject of oil. Now you have a supplementary brief which is to be presented by the man who signs it, Mr. Horne of Vancouver Island Coals Limited. Will he tell us about that company?

A. What do you want to know?

Q. Who are they?

A. They are a wholly owned subsidiary, and is really our Sales Department.

Q. They sell all your coal?

A. Yes.

Q. Nobody can buy any coal from Canadian Colliery (Dunsmuir) Limited except through Vancouver Island Coals Ltd., your Sales Department?

A. Yes. They handle also the McLeod River Company sales, and the McLeod River Company bill direct.

Q. Tell me that again?

A. The McLeod Company invoice direct.

Q. From Morcoal?

A. They invoice in Nanaimo.

Q. In other words the accounting and billing is not done by

Vancouver Island Coals Ltd.?

A. It is done by the same staff.

Q. Tell us exactly what the market set-up is for McLeod River?

A. It is a separate operating unit. They sell the coal and as the shipments move you write it on a piece of paper that bears McLeod's name instead of Vancouver Island Coals Ltd.

Q. And Vancouver Island Coals Ltd. have nothing to do with sale of McLeod River coal?

A. They actually do the selling.

Q. They actually sell the coal?

A. Yes, the same staff.

Q. Where is the staff of Vancouver Island Coal?

A. The Sales Department is in Vancouver and the office end is in Nanaimo.

Q. Accounting and billing is in Nanaimo?

A. Yes.

Q. Vancouver Island coal is sold by Vancouver Island Coals Ltd. and the accounting and billing is done by Vancouver Island Coals Ltd.?

A. Yes, but Vancouver Island Coals Ltd. is nothing but a name, they sell the coal for the subsidiary. Coming down from the past where they used to have deep sea connections all over the world they used to sell the coal through this subordinate company, and we just maintained it. Might just as well write their invoices Canadian Collieries.

Q. What I want to know is, is there any material difference between the coal mined by Canadian Collieries, and McLeod River, so far as Vancouver Island Coals Ltd. is concerned?

A. None at all.

BY COMMISSIONER MORRISON - In other words you could wipe out Vancouver Island Coals and burn the papers of the subsidiary, and do it direct?

A. Yes, and we could save a little book-keeping.

MR. THOMAS AUDLEY HORNE takes the stand.

BY MR. FRAWLEY - You are an officer of Vancouver Island Coals Ltd.?

A. Yes.

Q. You live in Vancouver?

A. Correct.

Q. If you will just develop it by reading this brief, which will be Exhibit No. 83.

Exhibit No. 83 - Supplemental Brief on Marketing and distribution by Vancouver Island Coals Limited - 26/3/45.

Mr. Horne then reads Exhibit No. 83, as follows:

"Mr. Chairman and Gentlemen of the Royal Commission:

I beg to submit a brief expanding the reference in the main brief regarding the marketing and distribution of coal handled by the Vancouver Island Coals Limited.

For the purposes of clarity we will divide our submission into seven categories under the headings Domestic, Industrial, etc.

DOMESTIC:

The domestic market served by the Vancouver Island Coals Limited, which is the selling agency for Canadian Collieries (Dunsmuir) Limited and the McLeod River Hard Coal Company (1941) Limited, comprises the greater part of British Columbia but it is naturally concentrated to a large degree in the lower mainland and the south-east coast of Vancouver Island and is supplied from our mines on Vancouver Island and Mercoal, Alberta.

Some indication of this position can be found in the figures covering coal supplied to the various districts for domestic consumption from July 1st, 1943, to June 30th, 1944, and we file as Sales Exhibit No. "A" a detailed statement covering domestic shipments over a ten year period from 1934 to 1944, from which can be seen the tonnage supplied varied from a low of 166,698 tons to a high of 429,577 tons.

The total potential market for the same area is, in our opinion, approximately 700,000 tons per annum. On the other hand a return to unregulated oil would indicate a minimum loss in domestic coal alone of approximately 100,000 tons per year

unless some definite means of retaining this market for coal is established.

A detailed statement of fuel oil consumption in British Columbia and the Yukon, in imperial gallons, from 1935 to 1943, showing the disposition by outlets -- domestic, industrial, railway and bunker -- also the gallonage imported and that manufactured in British Columbia for fuel oil, is filed as Sales Exhibit No. "B".

From this it can be seen that our estimate of 100,000 tons of displaced coal is not overly pessimistic."

BY MR. FRAWLEY - Mr. Horne, when you use the words "return of unregulated oil", you mean it is now controlled and regulated by oil control, and hard to get, and so on?

A. That is right.

MR. HORNE continues Brief

"Furthermore, of the total tonnage handled in this area, there is a considerable volume from the Drumheller field which is indirectly bonused by a 65¢ a ton rail subsidy and thus enjoys a market which normally would be beyond their reach. In fact, it would be far more reasonable to bonus shipments of our McLeod River coal into the Winnipeg market which is certainly a natural market as opposed to an unnatural one in Vancouver for Drumheller coal.

The introduction of small domestic coal stokers has contributed in a large degree in keeping a number of private dwellings on coal, and the number of these units will, in all probability, increase considerably when the necessary materials are available. This will have the effect of hastening the trend, which is now appreciably evident, of the market away from Lump to Stoker coals, and will necessitate a complete reassessment of price schedules, as there is little doubt that we will have to crush Lump coal to make Stoker coal in the not too distant future.

The method of distribution adopted for the retail market is through dealers strategically located in the various

centres of population.

In order to limit the price charged the public, in 1931 we leased seven waterfront plants in Greater Vancouver which had adequate storage facilities, and at these points we carry inventories and sell to the trade on a fixed margin basis. This arrangement protects the public and makes coal available to all, but does not prevent dealers from buying direct from the mine if they so elect.

INDUSTRIAL:

The tonnage supplied to industrial plants during the twelve months from July 1st, 1943, to June 30th, 1944, by the Company, was, in round figures, 200,000 tons. This can be seen from Sales Exhibit No. "C" covering the distribution of industrial coal by outlets over a ten year period from 1934 to 1944. This volume is some 50,000 tons in excess of the immediate pre-war years."

BY MR. FRAWLEY - I didn't notice that you were going by these "A", "B" and C's". Don't you think it would be better to refer to them as you come to them?

A. They are filed at the back of the brief.

Q. Would it not be better if you referred to them as they appear in the body of the brief?

A. I have.

Q. But have you taken the Commissioners' through them?

A. No.

Q. Unless you want them to speak for themselves?

BY COMMISSIONER MORRISON - You just want them for reference don't you, Mr. Horne?

A. If you take the figures on oil in hundreds of millions of gallons, I could refer you to one or two outstanding points, but to read them through..

BY MR. FRAWLEY - I was not thinking of that, but if there is anything you want to call the attention of the Commission to?

A. Certainly, but I thought we would do that later.

MR. HORNE continues Brief

"This volume is some 50,000 tons in excess of the immediate pre-war years, a large proportion of which might be termed "forced business" and will, in all probability, return to oil as soon as available. The remaining 150,000 tons can probably be held. By this we do not mean to suggest that the 63 million gallons of oil consumed industrially in 1943 was necessary -- this displaced well over 400,000 tons of coal.

This picture would have been a good deal brighter had the mines been sufficiently manned over the last three year period as we could then have supplied the grade of coal most desirable for any particular operation and thereby convinced the customer that there is no loss of efficiency when coal is burned under modern firing methods. Whereas, with the lamentable production which we have had to contend with, many customers have had to take any grade of coal they could lay their hands on and be thankful. There are, in fact, some users of pulverized coal who, because of the shortage of Fine coals, have had to accept Lump coal crushed at the mines to the smallest size our crushers are capable of and pay Lump coal prices, plus the cost of crushing. This does not tend to induce industrial users to continue using coal when oil again becomes available.

RAILWAYS:

The two transcontinental lines, prior to the reduction in the output from the Island mines, due to shortage of manpower, that is in 1941/42, consumed approximately 50,000 tons per annum on each railway. However, as can be seen from Sales Exhibit No. "D" which we file showing supplies made over the past ten years. This situation has completely changed now, and, apart from a few specialized requirements, supplies to the two major lines have been suspended. Resumption would seem to be dependent entirely upon output."

BY THE CHAIRMAN - Just there, have you some information to indicate just what the manpower down the years of the war was as compared to pre-war days?

A. The only information I have is of course what I obtained from

the management.

Q. Will there be somebody give that?

A. They didn't give it to me in accurate figures. They just gave me a rough idea of the situation.

BY THE CHAIRMAN - I think Mr. Frawley we should have some information on that; the comparison between manpower today and down the war years in coal production.

BY MR. FRAWLEY - Mr. Plommer will have to cover that.

MR. HORNE continues Brief

"The Pacific Great Eastern, operated by the Provincial Government, and the Esquimalt & Nanaimo, by the Canadian Pacific Railway, both running exclusively within the Province, are operated on oil in their entirety and as long as this condition continues, they do not enter into our calculations.

In the case of the White Pass and Yukon Route; which, in the strict sense of the word is exported coal, however, for purposes of this brief we are considering it as a Canadian Railway as the major portion of the line is in the Yukon Territory; we were instructed by the Coal Administrator to supply their greatly increased demands from 1942 on, which amounted to over 15,000 tons a year as compared with 4,600 tons in normal times. This was supplied at the expense of domestic consumers and now, as the result of enormous stockpiles and the return to normal traffic over the line, the demand has ceased completely and is not expected to be resumed for some considerable time.

As can be seen from Sales Exhibit No. "B" covering fuel oil consumed in British Columbia, it may be noted that railways within the Province are presently consuming oil at the rate of over 36,000,000 gallons a year thus displacing a quarter of a million tons of coal.

BUNKERS:

Our position in regard to the supply of bunkers to deep-sea vessels has continued to decline at an alarming rate. We file Sales Exhibit No. "E" showing the position from 1934 to date of both deepsea and coastwise bunkers.

Present indications are that the supply of bunkers in the future will continue to decrease as the trend for some time past has been away from coal to either oil fired or diesel powered vessels. However, a successful installation of automatic stokers was made by the Canadian Pacific Railway in their "Beaver" ships on the Atlantic and we cannot help but feel that encouragement should be given to Canadian owners at least, to so equip their vessels that they are able to use a native product with efficiency comparable to that of oil.

We might add that the foregoing remarks in connection with oil burning vessels as opposed to coal, apply equally to the coastwise fleets on the British Columbia coast from tugboats to passenger liners.

Bunker supplies carried a 75¢ a ton Dominion Government subvention which was passed on to the ship owner by the collieries. This, however, was suspended on March 1st, 1943, with respect to deep-sea vessels only,

The American Mercantile Marine, which is now by far the largest in the world, is 99% oil fired (this includes diesels). The Scandinavian fleets have for many years been almost exclusively diesel and even our own Park Steamship Line has found it necessary to transfer many of their coal burning vessels to the British Ministry of War Transport and replace them with oil burners, largely because they have been unable to obtain firemen.

In the past few years, hand-fired coal for ships' bunkers has lost ground to liquid fuel but the adoption of automatic coal burning facilities, either stokers or pulverized coal burners, should go a long way towards returning ships to the use of coal."

BY THE CHAIRMAN - I see you make a statement on page 5 there about equipping the Beaver Lines with automatic stokers?

A. That is right.

Q. They have done some of that, have they?

A. Yes.

Q. And you get from them, I presume, the idea or suggestion that the native product is capable of the same efficiency, practically?

A. Oh yes, they were eminently satisfactory, because there is a large fleet, and the first one was equipped with a chain grate stoker and proved satisfactory, so they followed through with the whole fleet.

BY COMMISSIONER McLAURIN - It has some disadvantages?

A. Yes.

Q. It takes more space, for instance?

A. Yes.

Q. The space could be used for profitable freight, I suppose?

A. Yes.

BY THE CHAIRMAN - The C.P.R. are not engaged in coal operations in this part of the country, are they?

A. No.

MR. HORNE continued brief.

EXPORT:

A very satisfactory volume of export coal has been built up in Seattle, Bellingham, Bremerton and Port Angeles markets over a period of years, and, in spite of a Government embargo extending over a period of nearly twelve months in 1943 (shipments to the United States Government were the only exemptions), we have managed to maintain the major portion of our sales. This, together with the White Pass and Yukon Route mentioned before, comprises the bulk of our export business. We have on occasions shipped small parcels of coal to South America but these have been shipments to fill an emergency. We file Sales Exhibit No. "F" which shows the gradual building up of this business over a ten year period.

GAS COAL

Owing to the increased demand and the falling off in production of coking coal, by reason of the manpower shortage, we have been unable to satisfy the requirements of the gas manufacturing plants with a result that quite a large volume of

this grade of coal is being brought in by rail from the interior although normally the coal from Vancouver Island is more satisfactory for the manufacture of gas.

CONCLUSION:

In conclusion we might say that, in our opinion, the prosperity or otherwise of the coal industry in British Columbia hinges to no small degree upon the competition of imported coal.

Respectfully submitted,

VANCOUVER ISLAND COALS LIMITED."

BY COMMISSIONER MORRISON

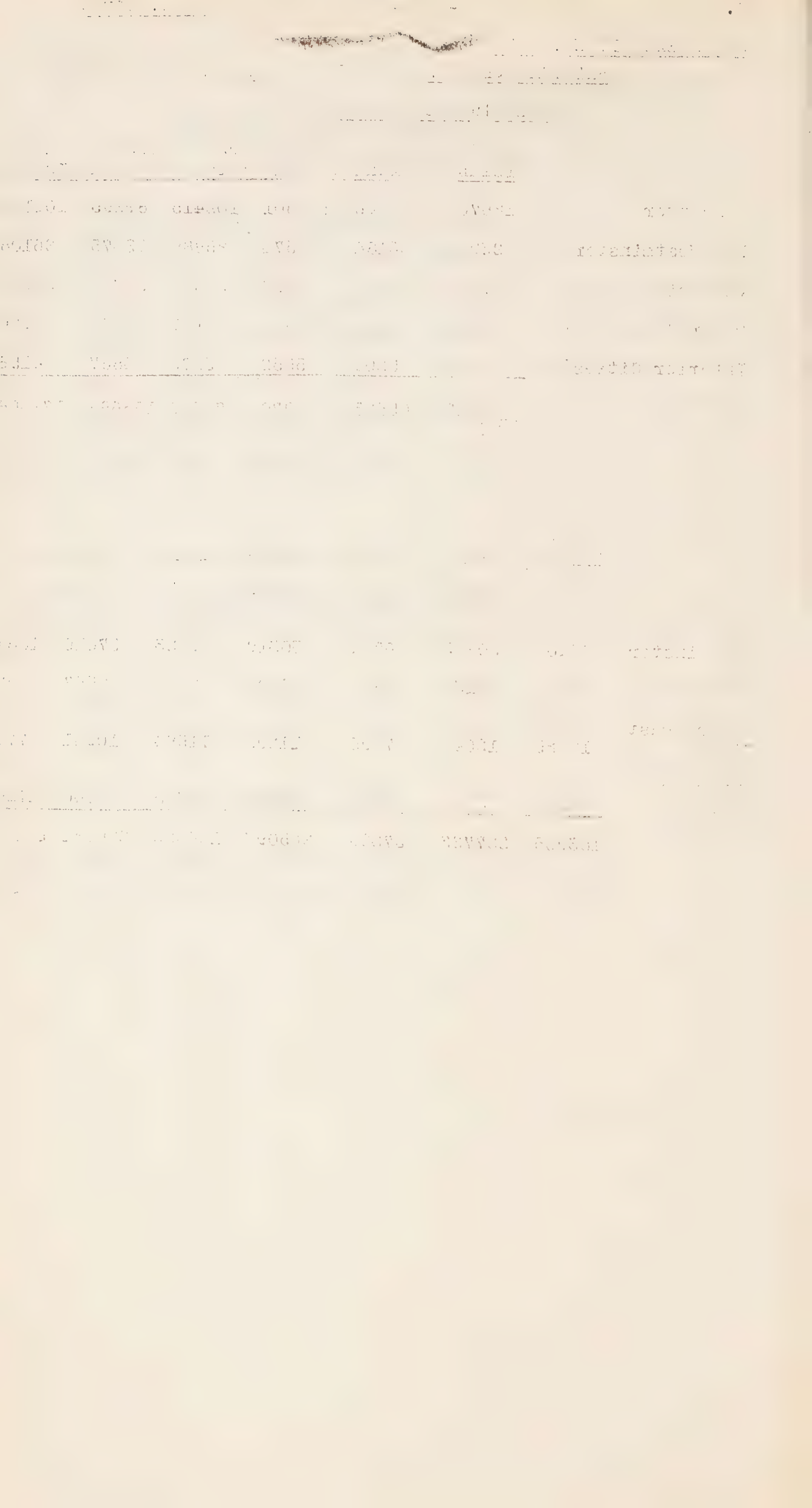
Q. All the rest of the pages are the Exhibits you referred to as Nos. "A" to "F"?

A. Correct.

SALES EXHIBIT NO. "A"BRITISH COLUMBIA DOMESTIC COAL SALESJULY 1934 to JUNE 1944

	1935 Island	1936 Island	1937 Island	1938 Island	1939 Island	1940 Island
Vancouver	126701	126426	119801	102415	89295	102185
New Westminster	23911	26184	27574	25888	23475	26108
Victoria	37592	38556	42497	34886	38780	37989
Other Coast Cities	9237	9155	10546	10137	10261	8970
Interior Cities	5076	5204	5552	5273	4887	4156
	202517	205525	205970	178599	166698	179408

	1941 Island	1942 Island	McLeod	1943 Island	McLeod	1944 Island	McLeod
Vancouver	197087	127066	29700	173719	76674	175767	78455
New Westminster	27400	30883	6714	30319	9823	37016	10811
Victoria	45359	54132	9840	46806	22202	60567	26929
Other Coast Cities	10025	12044	7695	11292	11584	10941	7749
Interior Cities	4034	3598	3380	2957	6343	4140	17202
	183905	227723	57329	265093	126626	288431	141146



SALES EXHIBIT NO. "B"FUEL OIL CONSUMPTION IN B. C. AND YUKON

(Imperial Gallons)

	1935	1936	1937	1938
Domestic & Building Heating	20995654	23003252	26454452	27255958
Number of Domestic Customers	6450	7922	8983	9522
Industrial Power and Heating	41422080	37118594	45346719	33389479
Railways	34453261	38832580	40690396	37829464
Bunkers	52007132	66615501	67095349	59398805
	148878127	165569927	179586916	157873706

Coal Equivalent in
Tons (Coal at 13000
B.T.U's - Oil at
9.33 lbs. per gallon
and 19000 B.T.U's
per lb.)

1015051	1128856	1224424	1076383
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Fuel Oil Imported
to B.C.

49368884	39744945	39409647	31962980
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Fuel Oil Manufactured in B.C.

99567910	126100537	140323032	126047247
148936794	165845482	179732679	158010227

	1939	1940	1941	1942	1943
Domestic & Building Heating	27800598	27909721	29609092	24923606	16387917
Number of Domestic Customers	15008	14006	21253	18740	16691
Industrial Power and Heating	38306818	49263364	53565141	65726501	63321162
Railways	35025401	32063397	43647013	44820681	36246073
Bunkers	73604578	69102280	58037731	60281360	63070439
	174737395	178338762	184858977	195752148	179025591

Coal Equivalent
in Tons (Coal at
13000 B.T.U's -
Oil at 9.33 lbs.
per gallon and
19000 B.T.U's
per lb.)

1191360	1215914	1260369	1334638	1220596
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Fuel Oil Imported to B.C.

37819306	32984063	46067974	38026817	39916130
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Fuel Oil Manufactured in BC

137682361	146136025	140199096	160267127	145215589
175501667	179120088	186267070	198293944	185131719

SALES EXHIBIT NO. "C"GAS AND INDUSTRIAL COAL SALESJULY 1934 to JUNE 1944

	1935 Island	1936 ^m Island	1937 Island	1938 Island	1939 Island	1940 Island	1941 Island
Vancouver Gas Company	60760	54186	67240	81980	71175	74543	76453
Victoria Gas Company	9752	9264	10433	10726	11452	11019	11785
B. C. Cement Company	6142	16302	17039	17940	17805	17121	28328
B.C. Pulp & Paper Company	15360	10461	13563	13481	18612	24714	24021
B.C. Sugar Refining Co.	19951	19677	18563	19936	20383	20123	19424
Logging & Lumber	6742	5145	6132	5034	6222	7185	3189
Other Manu- facturing	40860	12619	11437	11843	12056	10425	11211
	159575	127654	144407	160940	157705	165130	174411

	1942 Island	McLeod	1943 Island	McLeod	1944 Island	McLeod
Vancouver Gas Company	97316		63225		79837	
Victoria Gas Company	11574		13540		14709	
B.C. Cement Co.	31790		32068		33260	
B.C. Pulp & Paper Company	19931		19376		14847	
B.C. Sugar Re- fining Co.	16831		18410		19465	
B.C.E.R. Brent- wood					4884	
Logging & Lumber	1964		1416		1616	
Other Manu- facturing	15244	2302	20808	4930	25578	5487
	194658	2302	169343	4930	194196	5487

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SALES EXHIBIT NO. "D"TONNAGES SUPPLIED TO RAILWAYSJULY 1934 to JUNE 1944

	1935 Island	1936 Island	1937 Island	1938 Island	1939 Island	1940 Island
Canadian Pacific Railway	37194	23628	27804	24334	27720	22142
Canadian National Railway	23473	28475	30255	30024	30320	16770
White Pass & Yukon Route	4069	5744	7682	5724	6207	4671
	64736	57847	65741	60082	64247	43583

	1941 Island	1942 Island	McLeod	1943 Island	McLeod	1944 Island	McLeod
Canadian Pac- ific Railway	26543	47955		3989		2700	
Canadian Nati- onal Railway	20084	66291	7003	3419	4194		3272
White Pass & Yukon Route	3581	6961		16152		19759	
	50208	121207	7003	23560	4194	22459	3272

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SALES EXHIBIT NO. "E"BUNKERS SUPPLIED TO DEEP-SEA AND COASTWISE VESSELSJULY 1934 to JUNE 1944

	<u>1935</u>	<u>1936</u>	<u>1937</u>	<u>1938</u>	<u>1939</u>	<u>1940</u>	<u>1941</u>
Offshore	67887	87368	137986	137605	153161	175671	97760
Coastwise	30537	35529	39237	39881	29052	40629	45620
	98424	122897	177223	177486	182213	216300	143380

	<u>1942</u>	<u>1943</u>	<u>1944</u>
Offshore	59300	68009	44009
Coastwise	41652	37782	42800
	100952	105791	86809

SPECIAL EXHIBIT NO. "E"TONNAGE EXPORTED TO U. S. POINTS(INCLUDING U. S. ARMY)JULY 1934 to JUNE 1944

	<u>1935</u>	<u>1936</u>	<u>1937</u>	<u>1938</u>	<u>1939</u>	<u>1940</u>	<u>1941</u>
	<u>Island</u>	<u>Island</u>	<u>Island</u>	<u>Island</u>	<u>Island</u>	<u>Island</u>	<u>Island</u>
Seattle & Other U.S. Points	11920	25902	34615	35876	36371	35523	29773

	1942		1943		1944	
	Island	McLeod	Island	McLeod	Island	McLeod
Seattle & Other U.S. Points	58298	1925	30877	250	22670	3307

BY THE CHAIRMAN - Have you any suggestions to make as to how we are going to get in any way rid of the imported oil in this country as a competitor for coal?

A. I don't think you will ever get rid of it entirely.

Q. Any of it?

A. Well crude oil enters the country duty free and it is then cracked and the gasoline fraction drawn off and sold in a protected market.

Q. What do you mean?

A. There is a tariff on imported gasoline.

BY COMMISSIONER McLAURIN - Fuel oil enters free too?

A. No, it has a tax as such.

Q. A tariff tax?

A. I am not positive, but I am almost sure it carries a tax.

BY COMMISSIONER MORRISON - A half cent a gallon?

A. That is Provincial.

BY MR. FRAWLEY - I think you will find there is no actual duty on fuel oil.

BY THE CHAIRMAN to Mr. Horne

Q. Then your remedy to give you at least a fair chance of competition would be a tariff?

A. Undoubtedly, where one part of their product is sold in a protected market.

Q. Would that not be contrary to all ideas of tariff, to bring in a product which we have not got, and a necessity for that product, and to place a barrier on it?

A. That is quite correct if you have not got something which is quite competent to take its place. But we have.

Q. Well that depends of course a good deal. I am only looking for information and for some suggestions. If there is a wrong being done we would like to know how to remedy it.

A. Naturally coal cannot be expected to take the place of gasoline, although it does to some extent in Europe.

BY COMMISSIONER McLAURIN - You take the position that you are running into unfair competition with oil?

A. Yes.

Q. And you say the crude oil is being brought in here free and the oil receivers crack it and they load the price of gasoline and reduce the price of fuel oil, so that they sell the fuel oil below the cost of production?

A. Yes.

Q. And it is that kind of competition?

A. That we want to stop.

Q. But you would not object to competition from an importer of fuel oil from Los Angeles at the price that Importer pays in Los Angeles?

BY MR. FRAWLEY - You say the price of gasoline is loaded?.

BY COMMISSIONER McLAURIN - It may not be correct but that is the position he says he takes.

BY COMMISSIONER McLAURIN TO WITNESS

Q. The thing you complained about was that the receivers in British Columbia were loading the price of gasoline and depressing the price of fuel oil?

A. Right.

Q. But if I could go down to Los Angeles and buy fuel oil at the prevailing price there, and sell it, you won't complain about my bringing it in at the price I can buy it? I don't know whether it could be done or not. I want to narrow, if it is so, the field of your complaint.

A. If you could do that I don't see that we could have any complaint at all.

BY MR. FRAWLEY - That is fine. I want to ask you a lot more about oil, but I want to leave it for the time being. Would you go back to your Railway page. On page 4 you say that the two transcontinental lines were using approximately 50,000 tons per annum in 1941-42. If you look at Schedule "D", I don't think that is borne out. In 1941-42 you see what your totals are for Canadian Pacific, about 27,000 tons.

A. But if you look at 1942 you will find 47,955 tons, and the Canadian National 66,291 tons.

Q. In 1941 the Canadian Pacific was 26,543, and 47,955 in 1942?

A. Right.

Q. And you say that bears out that they consumed approximately 50,000 tons each in 1941-42.

A. Yes.

Q. Where has the business been lost?

A. It was not lost. We were instructed to suspend supplies.

Q. By a Coal Controller?

A. Yes.

Q. It is not through any lack of your efforts or the Railway Companies' wishes?

A. No.

Q. How about getting back some of that business after the war?

A. I don't think there will be any difficulty.

Q. You think you will get that back?

A. Undoubtedly.

Q. How does that meet with oil?

A. It still does not change the fact that the railways are using practically the same amount of oil, if not more than they were when we were supplying 50,000 tons a year.

Q. You think you can get back to 50,000 tons and let them burn as much oil as now?

A. Yes.

Q. That is not fuel oil?

A. That burned in B. C. I think would be, largely.

Q. And your sales of coal only applied to the B. C. operation?

A. Yes.

Q. As far as Kamloops?

A. Yes.

Q. Now I think, outside of oil, that is about all that I want to call particular attention to in your brief.

BY COMMISSIONER McLAURIN - You said at present there is an increased demand for coke and coal in domestic gas-manufacture?

A. Right.

Q. I think you say your coal is probably a superior coking coal

than the one that has displaced you or taken up the slack?

A. The Gas Company indicate that. There is a higher gas yield from Island coal than from the coal they are presently using.

BY MR. MORRISON - That is the Comox coal?

A. And Nanaimo.

BY COMMISSIONER McLURIN - No disadvantage?

A. No.

Q. Any sulphur content?

A. Yes, but no more than what they are presently obtaining.

Q. How does your residual coke compare with the coke of the other fuel?

A. Just as good.

BY COMMISSIONER MORRISON - Not better?

A. I would not say that.

Q. And when you say the other coke, what other coke have you in mind?

A. I understand they are now getting it from Crow's Nest Pass.

Q. There are two coking operations there, are they getting them from both Comox and International at Fernie?

A. I can't say.

Q. So your coal competitors have some trade secrets?

A. Yes.

BY THE CHAIRMAN - Is there not quite a demand for coke for household use in this province?

A. Not as heavy as one would expect. There is quite a storage of coke here in Vancouver now and they were recently exporting some.

BY COMMISSIONER McLURIN - Why is that?

A. Local demand is not sufficient.

Q. That might have a bearing on it?

A. That is right.

BY MR. FRAWLEY - Coke is not very acceptable in this market?

A. I would not go that far, but there is not the demand to absorb the total output.

Q. Does Vancouver Island Coals sell any coke?

A. No, we don't handle it at all.

Q. Do Evans, Coleman & Evans Ltd.?

A. In some quantities. The B. C. Electric do the most.

Q. Any coke coming from the United States?

A. No.

Q. Any from Crow's Nest Pass, domestic coke?

A. Could be, but not that I know of.

MR. HAROLD BAIRD (Sworn as to the facts

BY MR. FRAWLEY - Your name in full is what?

A. Harold Baird.

Q. And you are what? What is your professional background?

A. General Superintendent.

Q. Of?

A. Canadian Collieries.

Q. What are your qualifications for that?

A. I hold various mining certificates, first class, both in British Columbia and in England.

Q. Have you had any academic training in geology?

A. I have, but I have no degree.

Q. Apart from the degree, you have had some training in geology?

A. Yes.

Q. Where?

A. In the Royal Technical College in Glasgow.

Q. Any training in mining practice as well?

A. Yes.

Q. In the same college?

A. Yes, and I also served an apprenticeship with a mining concern in Scotland.

Q. You have also furnished something in maps, and would you now say what you have to say in regard to them?

A. All right.

Exhibit No. 84 - Plan showing the properties and coal rights of Canadian Collieries in Vancouver Island.

Q. What is this Map of?

A. Esquimalt and Nanaimo railways and company's land grants. On that plan we have colored in grey all coal rights, and colored in red

all surface rights.

Q. Are these coal rights held under lease from the Provincial crown?

A. Yes.

Q. I think the answer is no. I think they are all owned in fee simple by your company without lease of the Crown at all.

A. I am not familiar with that, but I know we have coal rights.

Q. That is what is colored grey?

A. Correct. Then we have a sub-division here into various areas, and that ties in with the areas mentioned in the brief submitted by Mr; Plommer. Starting at the northern portion of the plan we have first of all Comox area; then we have T'Sable River to Nanoose Bay, and next we have the Alberni area; further south we have Nanaimo-Wellington area; then we have the Gulf Islands, and the remainder which is the most southerly area.

Q. What do you call it?

A. Gulf Island and other districts.

BY COMMISSIONER McLURIN - The most southerly district you treat as one area?

A. Yes. Now would you wish me to continue with the coal reserves, or would you like me to show you marks of our property at Mercoal?

Q. You had better finish the Island first.

BY MR. FRAWLEY - What are the red spots?

A. They indicate surface properties owned by Canadian Collieries.

BY COMMISSIONER MORRISON - Have you another map showing the operations?

A. Yes.

BY MR. FRAWLEY - Showing the same area but showing the operating fields? Another map of the same size?

A. Not quite as big.

Q. But a map of the same ground?

A. Yes.

Exhibit No. 85 - Map showing coal reserved of
Canadian Collieries.

BY MR. HORNE - The scale used on Exhibit No. 85 is one inch to one mile.

BY COMMISSIONER MORRISON - What was the scale used on No. 84?

A. One inch to two miles. This is a map of the reserves and that should be a big help to the Commission if they had it and before them, /the chart showing the coal reserves in the various areas. There have been copies of the chart filed.

Exhibit No. 86 - Chart showing estimated coal reserves of Canadian Collieries.

BY COMMISSIONER McLAURIN - By reference to Exhibit No. 85, a map of the operations, you are going to indicate what is contained in your chart, Exhibit No. 86?

A. Right.

Q. Then we may as well listen, and if we have forgotten No. 86 we can refer to it.

A. The maps tie in with the chart. The present operation of the Cumberland area; and we are doing some prospecting work in T'Sable River. On this map the areas of what we class as actual coal are colored in green. Areas of probable coal are colored in purple; and areas of possible coal are colored in yellow. At the top of the map we have the Quinsam area. Do you wish me to indicate the tonnage there, or will you accept it from the chart?

Q. You had better get it into the record.

A. In Quinsam area we have 3,700,000 tons of probable coal, and 21,500,000 tons of possible coal.

BY COMMISSIONER MORRISON - Where is this Quinsam area?

A. It is up in the northern end of E & N grant.

Q. How many miles from Cumberland?

A. About 35.

Q. As the crow flies?

A. Yes.

BY THE CHAIRMAN - There is no actual coal there?

A. No.

Q. I would like to get for my own benefit, your distinction

between "probable" and "possible". I cannot understand what "possible" coal is.

BY MR. FRAWLEY - Who put these labels on the reserves Mr. Baird? The labels of "probable" and "possible"?

A. We did, but it is very common practice to use those terms.

BY THE CHAIRMAN - We got it down in New Brunswick and it just about set me crazy.

A. On this chart we have the definitions. I will read them. In making up our minds about the coal reserves we took various factors into consideration. The first four are - Available - they include thickness, quality, workability and depth below surface. Then we have the assurance factors, and the definitions of assurance factors are as follows: Actual coal means coal known to be in a given area, either through mine workings, systematic diamond drilling, or sufficient surface exposures. Probable coal means coal seen at outcrop or found in diamond drill holes dispersed over an area in systematic prospecting, by this means finding coal likely to occur in areas adjacent to actual coal areas. Possible coal applies to an area presumed to be coal bearing by means of an isolated outcrop, or from one or two bore holes, or where insufficient prospecting has been done to raise it to the probable class.

Q. How do you make an estimate of possible coal? I see you have 127,000,000 tons of possible coal. How did you arrive at that?

A. In that particular area?

BY COMMISSIONER McLAURIN - The whole area I think.

A. We take into consideration both the available factors and the assurance factors, and use a good mining engineer.

BY THE CHAIRMAN - Once you get an assurance factor you have actual coal, or probable coal, have you not? The assurance factor does not enter into the possible coal at all, does it?

A. To a certain extent.

BY COMMISSIONER McLAURIN - You don't make any estimate without having located some coal?

A. No. In a possible area there has been some definite location of coal, either by an isolated outcrop or by one or two drill holes. We know the coal is there.

BY THE CHAIRMAN - My difficulty is how you then go to work and say we have 120,000,000 or 30,000,000 or 40,000,000 tons of coal in this possible category?

A. Well we take our area which is defined, possible by an outcrop, and we know the thickness of the coal at the outcrop, or in the isolated drill hole, and we multiply and find..

Q. You multiply a little by nothing?

BY MR. FRAWLEY - As if it continued. You make some pretty broad assumptions?

BY THE CHAIRMAN - I think we are supposed to get some fairly definite idea of what the coal reserves definitely are. I am not finding any fault with anybody, but do you think it would be proper for us to make a statement that we have 120,000,000 tons reserves in British Columbia, and a billion in Alberta, and so many in Nova Scotia and New Brunswick, on the theory of this "possible"?

A. No, you would need to qualify it.

Q. We would have to explain what is meant by that?

A. Yes, you would have to explain.

BY MR. FRAWLEY - Is there something else you want to say about your coal reserves?

A. Yes.

12:03 P.M. HEARING ADJOURNED UNTIL 2:00 P.M.

Monday, March 26th, 1945 - 2:00 o'clock P.M. Hearing reconvened.

Mr. Harold Baird returns to the stand.

BY MR. FRAWLEY - Just carry on Mr. Baird.

A. Well gentlemen, this morning I was describing the Quinsam area. Here we have an area delineated that represents a possible tonnage of 21,500,000, and a recoverable tonnage of 3,700,000.

BY THE CHAIRMAN - Suppose I had that for sale. On what basis would you buy it?

A. I would want to have a lot more information than we have at present. This other area here is the Campbell River area containing a possible tonnage of 33,000,000. Then the Salem River area shown here with a possible tonnage of 55,000,000. Then we have a small area by the south which we call Dove Creek and Brown Sugar area containing a possible tonnage of 5,000,000. Perhaps at this point it might be advisable to have more charts. I am quite sure you would follow it better if you had a chart in front of you.

BY THE CHAIRMAN - Do you own all the ground between those areas?

A. We own the coal rights.

BY COMMISSIONER MORRISON - Whatever that may mean.

A. Yes. If there is coal there, we own it. Then we get into the Cumberland area now, and this is where we are mining at present, delineated in red and patched in red are mine workings, old workings and present workings. In Cumberland at No. 5 mine we estimate that we have 360,000 actual tons; that is shown in three different places here in green. We know that that coal is there.

Q. What is that?

A. No. 5. At No. 8 mine in No. 2 seam we have an actual tonnage of 2,700,000 tons; and in No. 4 seam at the same mine we have an actual tonnage of 2,500,000 tons.

Q. Making a total of, roughly?

A. 5,560,000 tons of actual coal between the two mines.

Q. And what percentage of recovery do you look for to get that amount of coal? On what basis did you estimate your recovery,

what percentage of recovery?

A. We estimated it on a recovery of 75%. In our calculations we adopt a formula of 100 tons per inch per acre, and that makes an allowance of 25% for loss in work. To sum up, this area, that is from Cumberland up to Quinsam, we have 5,560,000 actual, 12,200,000 probable, and 41,000,000 possible. Now we come to the Sable River area.

Q. Before you leave that area, has there been a geological survey made on that area?

A. There have been various geological surveys on the properties. We had, in 1923 MacKenzie spent some time in the field and made a report, but it has not been thoroughly geologized.

Q. I think Mr. Plommer gave us a quotation from Dr. Gray, in his brief on page 4. That is from the report of Dr. Gray in 1928, that is 17 years ago, and nothing has been done about it since?

A. There has been something done since. In 1939 Dr. Buckam of the Geological Survey came through and started geologizing that area and he spent a few months there, and they called him back to Ottawa, and he came through again two years ago and spent several months geologizing both in Nanaimo and in Cumberland. He is due on the Coast again I understand within two weeks to continue that survey. He has not made any report.

BY MR. FRAWLEY - I think there was an error, Dr. Gray's report is 1938, not 1928.

BY COMMISSIONER MORRISON - And in these reports of Dr. Buckam and the rest of them, they have been in that area?

A. Yes.

Q. But you would say that up to now they have made only a casual survey?

A. I would say that was correct. Much work remains to be done.

BY MR. FRAWLEY - These areas have been held by your company, or the predecessor company, for many many years?

A. I understand so.

Q. But there has been no geologizing of any kind done, to speak of?

A. There has been on various occasions. The last one (apart from the present one which is in the course of being made) was in 1923.

Q. And then Dr. Gray's report in 1938, in which he called attention to the need of a geological map?

A. Through his influence I understand it was renewed in 1939.

Q. For many many years the Island properties and those properties were being worked apparently without any geologizing of the northern area?

A. Quite right.

BY THE CHAIRMAN - Are those reports available to us?

BY MR. FRAWLAY - Yes; I would ask Mr. Plommer to file Dr. Gray's report. And who made the 1923 report?

A. MacKenzie.

Q. Was he employed by the Company?

A. No, he was a Dominion Government employee.

Q. Perhaps you can give us particular reference to that report and we can get it at Ottawa.

A. Yes. Now getting down to the T'Sable River area. We have in the upper portion of the field No. 4 seam, 750,000 tons probable shown here. In No. 3 seam in the same area we have 1,350,000 tons and in No. 2 seam 3,600,000 tons.

Q. That is all T'Sable River?

A. Yes, and all in this area. Then the lower portion of the field in No. 2 seam, that is the area in purple, we have a probable tonnage of 4,300,000 tons. Then in all seams in the remainder of the area, colored yellow, we have a possible tonnage of 42,800,000 tons.

Q. No actual in the yellow?

A. No.

Q. Because the yellow means Possible?

A. Yes.

BY COMMISSIONER MORRISON - Now on this possible stuff. At the outline of your yellow line, or your possible reserves, future surveys may develop that line a lot further both northerly and southerly, or have you definitely found that that is the line where the coal ceases to be of commercial value?

A. No, there is nothing definite. After considering all the

factors we delineated that area.

Q. On what grounds?

A. We have several drill holes in that area.

BY COMMISSIONER McLAURIN - And some outcrops too, I take it?

A. Yes, all at the end of the field; but in the lower portion of the field the seam is tapped.

BY MR. FRAWLEY - And is that the end of that map?

A. Yes. Now in the area T'Sable River, which is the end of the map which was just taken off, at Nanoose Bay. This plan is Nanaimo-Wellington area. But before discussing this, from the bottom of the previous plan (Exhibit No. 86), from T'Sable River to Nanoose Bay we have insufficient data, and we have no tonnage estimates for that area. The same applies to the Alberni area, which is further west and which I pointed out on the first map. We have no tonnage estimates on that area.

BY COMMISSIONER MORRISON - But you still own the property?

A. If there is coal there, we own it. Possibly when the geological survey have completed their investigations there will be districts in that area which will prove to be coal bearing and we have coal of workable quality.

BY MR. FRAWLEY - Do you have a tax in this province on mineral rights?

A. A Provincial tax?

Q. Yes.

A. I am afraid I am not familiar with that.

Q. Are you paying taxes on this possible acreage?

A. No, we pay a royalty on the coal that we mine.

Q. And the only tax you pay to the Province is on coal produced?

A. I understand so, although I am not acquainted with the Head Office work to that extent. Then in the Nanaimo-Wellington area we have again adopted the same scheme. The green is actual, purple, probable, and yellow, possible. The main workings again are in red. You will notice the main workings are more extensive in this district than in the Comox area.

Q. You don't distinguish between old workings and new.

A. In all the areas in red the coal has been worked out.

Q. You say the coal has been worked out in all the areas in red?

A. Yes.

Q. Then everything in red there is abandoned workings?

A. Yes.

BY THE CHAIRMAN - What you call the abandoned workings, is it the improbability of gaining more coal from there.

A. There are one or two small operations along the outcrops, but for any sizeable body of coal, there is no chance at all. There might be employment for two or three men in a little operation.

Q. That is the reason you abandoned them, they were not commercially valuable?

A. Yes. This represents all the workings from away back. In the Douglas seam at No. 10 mine, we have an actual tonnage of 600,000, and a probable tonnage of 80,000. South of Grandby mine there is an area which we consider to contain a probable tonnage of 360,000, and a possible tonnage of 1,100,000 tons. Still staying with the Douglas seam, there is an area of possible coal here in the cedar district amounting to 30,000,000 tons. Summing up for the Douglas Seam in the Nanaimo-Wellington area, we have 600,000 actual, 440,000 probable and 31,100,000 possible. In the Newcastle seam there is a small area at Chase River where we have a possible tonnage of 140,000 tons.

Q. Not even "probable"?

A. No, it is "possible". The average thickness is only two feet, and the time may come when methods will be devised to work it economically, but at the present time we would not think about touching it. It is therefore classed as "possible". In the Wellington seam at Departure Bay there is an area drilled here which we estimate to contain 425,000 tons of "possible" coal. There again the seam is thin, 2 ft. average. Then we have a small area at Little Ashmey, which we drilled, and which we estimate to contain 24,000 tons of "probable" coal.

Q. How thick is that?

A. The thickness is on an average of 5 feet. Now we will go to our new mine in Nanaimo, White Rapids. That again is in the Wellington seam. We have a green area here representing 500,000 tons of actual coal. We have drilled it thoroughly and consider it actual. We also have a little strip here which is "probable", and down in the corner here we have 255,000 tons of "possible".

BY COMMISSIONER MORRISON - Is that possible coal accessible through your present workings?

A. It will be when we get down there. There is a fifty-fifty chance of the coal continuing below the railway.

BY COMMISSIONER McLAURIN - What is your "actual" there?

A. 500,000 tons.

Q. Including all the surface workings, over 500,000 tons of coal?

A. Correct. We hope it will expand, but that is all we will guarantee. The grand total for the Nanaimo-Wellington area - "actual" 1,100,000 tons; "probable" 497,000 tons, and "possible" 31,920,000 tons.

Q. What would you mine at White Rapids per year providing there are markets?

A. The mine is capable of producing up to 700 tons per day.

Q. 150,000 tons a year?

A. Around that.

Q. You only have about $2\frac{1}{2}$ years actual coal there?

A. Yes.

Q. Providing there is a market and you work to maximum capacity?

A. Yes; but it will take a little time to get to that tonnage.

Q. What have you invested in the surface workings there, \$150,000?

A. Fully that.

Q. You may have to get your money out in the first three or four years?

A. Yes.

BY MR. FRAWLEY - Are you getting some coal out there now?

A. Yes, we are getting a little coal out.

Q. Mr. Fagan has the pit-head costs on that?

A. No, it is not on a cost basis yet. We are just approaching

S.

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Harold Baird

that stage now. It has been a development cost until now.

Q. It is capital cost up to now?

A. Yes.

Q. Before you leave there, you passed over the Cranberry district?

A. I didn't mention Cranberry.

Q. Here is a man that is going to say he operates a little mine there at Cranberry and he wants to lease some coal there that you left behind, but he has not been able to make a deal with you.

Do you know anything about that?

A. No, I don't.

Q. You don't know anything about Cassidy mines?

A. No.

Q. You don't know anything about their attempts to negotiate a lease with you?

A. No, I don't know anything definite. The rest of the company owned coal rights are south of the map, so we do not consider that there is anything that we can estimate on a tonnage basis there. That finishes the maps of the Island. If you are ready I will go on to Mercoal.

Q. Are you the Superintendent of Mercoal too?

A. Yes.

BY COMMISSIONER McLAURIN - I would like to ask a question.

Take for example the Campbell River "possible" area; that was on Exhibit No. 86. You are acquainted with it?

A. Very slightly.

Q. But you have told us about it?

A. Yes.

Q. You gave us an estimate of possible coal there?

A. Correct.

Q. Taking that area as a sample, would you mind telling us specifically just what data you have on that area, on which you based your estimate.

A. Well we have a few drill holes.

Q. When you say a few - how many?

A. Off-hand I cannot say. But there were some drill holes put

down in that area, and there are some outcrops.

Q. And that is what you have to work on?

A. Yes, that is all.

Q. And would your drill holes indicate the number of seams you are likely to encounter. Are those two, Newcastle and Douglas seams common to the whole area?

A. No, in Nanaimo only; not in Comox. We have a different source there.

Q. How many do they run?

A. We have four seams in the Cumberland area, Comox area.

Q. They are distinguished by numbers?

A. Yes.

Q. So taking Campbell River as a sample, your data is fairly limited?

A. Very limited.

Q. And open to a very wide margin of variance?

A. Yes. As a matter of fact a lot of data we have is from MacKenzie's report.

Q. 1923?

A. Yes. Since I came we have not done any work in that area at all.

Q. You call the two mines at Cumberland No. 5 and No. 8?

A. Yes, No. 5 and No. 8.

Q. How many seams are you working there?

A. Only one at the present time, No. 2 seam.

Q. And you have others?

A. No 4 seam ready to work at No. 8 mines.

Q. What is the thickness of No. 2 seam?

A. It varies in thickness, the average is 2 ft. 6 in. at No. 5 mine, and 3 ft. at No. 8 mine.

Q. No 8 mine is the 1914 shaft?

A. Correct.

Q. And the average is approximately?

A. 3 ft. at No. 8; 2½ ft. at No. 5.

Q. Is it a high volatile coal?

A. Well it is classed as medium volatile.

Q. And do you beneficiate all that at where? Union Bay? Do you put it through the washer at Union Bay?

A. Everything below 3 inches goes through the washer.

Q. What do you lose in beneficiation?

A. Anything from 20% to 25% of the coal washed.

Q. Because it is dirty and because of ash, both?

A. Because of dirt in the coal.

Q. Can you tell me what your ash content is before beneficiation

A. Very close to 30%.

Q. What is it after?

A. It varies so much in the various grades that I could not give you one figure which would be entirely accurate.

Q. Would you be left with 10% or 15% inherent ash?

A. Our lowest grade is possible 15% or 16%, and our best grade in the nature of 11%.

Q. What is your average production per man?

A. At No. 5 mine, I am speaking just from memory, the average surface and underground is 2.1, and at No. 8 mine the average is about 2.5.

BY MR. FRAWLEY - What did you say that the ash was in your Comox? This is Comox coal, high volatile "A" Bituminous?

A. It has been classed, part of it as medium volatile.

Q. It is suggested to me you should give us the over-all tons per man after treatment. What would that be?

A. May I refer to some notes?

Q. Surely.

BY COMMISSIONER McLAURIN - That figure will have to be an average of both mines, coal from two mines going through the same plant.

BY MR. FRAWLEY - You run the coal from both mines through that washer at Union Bay?

A. Yes, but we run them separately.

Q. You don't batch them?

A. No. I was going to give you an average tonnage per man for the whole operation; the figure is 1.63.

Q. Just exactly what is that, the tons per man per day?

A. Including everybody, surface and underground and railway, all employees.

Q. That is after beneficiation?

A. Yes. That is commercial coal. The figures I gave you before were tippie tons.

Q. I have the average analysis for Comox area, that would be your No. 2 seam, and those two mines Nos. 5 and 8?

A. Yes.

Q. Moisture 2.5. Does that check with what your recordsshow?

A. No, that is high.

Q. Well do you know if there are any other coals mined in the Comox area except your own coal?

A. I don't know of any others.

Q. And that is classed in the new A.S.T.M. as high volatile bituminous. Ash 12.8.

A. We have some at that, and less than that.

Q. Volatile 31.2?

A. That is low.

Q. What have you got?

A. Anything from 35 to 37.

Q. Fixed carbon 52.5?

A. That is an average. We have 50 to 54.

Q. Sulphur 2.2?

A. That is about the average. In No. 4 seam the sulphur is very much less.

Q. How much less?

A. It is nothing.

Q. This would not be an average of the seam?

A. We have been mining it in the past, and we will be mining at No. 8 in the future.

Q. B.T.U. 12730?

A. That is low. We have many analysis which show well over 13,000. I have them here up to 13,705.

Q. And the softening temperature of the ash 2280?

A. That would be about correct.

Q. And the coking properties are good. Is that correct?

A. Yes.

Q. Now you will tell us about Mercoal. Run through the reserves there?

A. Yes.

Q. I want to understand - talking about tons per man per day, I understood that Mr. Fagan was going to put in some records covering all your properties about that?

A. That can be done.

Q. Before we go to Mercoal, while still down by the sea, you had better put in this labor agreement, this wage agreement.

A. I would like to file this as an exhibit. It is our Labor Agreement with Mr. W. M. W. Faye, and it is complete with the exception of the clause dealing with the O'Connor award and the 77% Cost of Living bonus which applies to the contract miners.

BY COMMISSIONER MORRISON - It is effective?

A. It has been omitted in this.

BY MR. FRAWLEY - How do you apply that to a worker?

A. We put it on as a lump sum

Q. You just add that to his contract?

A. Yes.

Q. \$1.77 a day?

A. Yes.

Q. Also by virtue of the O'Connor award you are giving them 2 weeks holidays every year with pay, when certain conditions are complied with?

A. Correct.

Q. Will you tell us whether that is improving the Saturday production?

A. No, it has not improved it. We are still not able to work on Saturday afternoons in Comox.

Q. Because of absenteeism?

A. Because we don't get a big enough tonnage out.

BY COMMISSIONER MORRISON - You don't even try?

A. Yes.

Q. Didn't you make a local agreement with the men at Cumberland that you would work $5\frac{1}{2}$ days a week?

A. No, we always maintained that we wanted to work six days.

Q. But you had some absenteeism, and it was unsatisfactory, and it is more or less the Unwritten Law with Cumberland now that you don't work Saturday afternoon?

A. I would not say it is the Unwritten Law. We periodically remind the Union that the mine is open for operation.

Q. How often do you get the urge to do this periodically stuff?

A. Whenever there is an opportunity; when we have a meeting.

Q. I am serious about this Mr. Baird. You say that periodically you remind them. When do you consider the proper period to get the urge to remind them, every week, or every month, or every three months, or when the spirit moves you?

A. Possibly every three months.

BY COMMISSIONER McLAURIN - Why should they be urged at all?

BY COMMISSIONER MORRISON - I don't know why anybody should be urged to work on Saturday afternoon.

BY MR. BAIRD - On two occasions at least we have tried to work the mines on Saturday afternoon within the last year and we have just had a very few men come out.

BY MR. FRAWLEY - Well now Mr. Baird, you have a per ton cost on Saturday that is more than your per ton cost on Monday, Tuesday or Wednesday?

A. Yes.

Q. And that is one reason why perhaps you should work on Saturday, to get your average per ton cost down?

A. Yes. Naturally if we were able to work the full day on Saturday we would have a bigger tonnage.

Q. And therefore your per ton cost would be down?

A. Correct.

Q. And how about Friday? Does it cost a little more to produce coal on Friday than on Monday, Tuesday and Wednesday?

A. I can't say that I have noticed very much difference on Friday, except if there is some special occasion. On Saturday

a great many of the men go away for the week end, and very often they might go on Friday.

Q. But from week to week you do not find absenteeism is practiced more on Friday than on any other day of the week except Saturday?

A. I can't say that I noticed much difference, but I do know that every second Thursday we have the best tonnage. That is the day the pay statements are given out.

Q. Why don't you put in a five day week and be done with it? Don't blow the whistle at all on Saturday.

A. Possibly it would pay to do that, but we are anxious to produce as much coal as possible to meet the demand.

Q. You don't get very much subvention in this country from the Federal Government, do you, by and large?

A. Not very much.

Q. Because if your pit-head per ton cost is up, then the question is raised as to whether a company of that sort, if their costs are out of line, should be receiving it. Is there a question raised there?

A. By whom?

Q. By perhaps the general tax payer, as to whether Federal aid should be extended to companies whose costs are out of line or higher than average?

A. It might arise.

Q. Why don't you seriously consider just working 5 days?

A. Because we always get some coal on Saturday and that goes to help meet the demand.

BY THE CHAIRMAN - At a very enhanced cost, do I understand?

A. Yes, it is.

BY MR. FRAWLEY - So you would have a much better per ton cost performance if you didn't work on Saturday?

A. Possibly, but you must bear in mind that even if no coal is coming out of the mine, we have a certain staff we must employ to look after the pumping and ventilation.

Q. But that would be down to a minimum. Your hoisting staff would not need to be there?

A. Yes it would need to be there, the hoistman.

Q. For emergency I suppose, but your tippie gang would not need to be there?

A. Certainly not.

Q. Your necessary essential men that you would have to have working on Saturday would be a minimum?

A. If the mine was not working.

Q. And having those men out would not increase the per ton cost very much for Saturday?

A. Not very much.

Q. What would stand in the way then of deciding next week that you would not blow the whistle on Saturday?

A. By reason of the fact that we are producing as much as we can, and if we leave the mine idle on Saturday we lose a certain tonnage.

(Page 625 follows)

BY THE CHAIRMAN: Is it a fact that the coal people at Ottawa are demanding all the coal you can get?

BY MR. FRAWLEY: I am just wondering whether somebody in Ottawa might say you would have to work six days whether you wanted to or not?

A Possibly if we didn't we would be asked to do it. I think they realize at Ottawa we are producing as much as we possibly can with the men we have available.

Q How about District 18? Would they sit quietly by?

A Possibly. According to Mr. Morrison's remarks I imagine they would sit quietly by and enjoy it.

Q Then you only have to worry about Ottawa saying, we want those few tons of coal no matter how much more costly they are than Thursday's or Wednesday's coal, we want that coal out; and during the war they are paying subsidies to keep coal moving?

A Yes, that is substantially correct.

Q But apart from Wartime Coal Control, if you had your way, or am I right in saying if you had complete control of the situation you would not blow the whistle at all on Saturday, just have your necessary skeleton staff out, and that would give you a much better per ton cost for the whole week?

A We might do that if the men absented themselves as much on Saturday as they do at the present time.

Q Now tell me this then, approximately how much coal would you hoist at No. 5, Comox, on a Monday, say last Monday?

A 500 tons.

Q How much last Saturday?

A 230.

Q It is only one shift, of course, Mr. Plommer says?

A Yes, but we have sometimes extra men out on Saturday morning to make up.

Q You have a heavier shift on Saturday morning than on the Friday morning shift?

A Correct.

Q Anyway, whether it is because you only work one shift on Saturday or whether it is because of absenteeism, nevertheless you have a larger cost on Saturday?

A I would say so.

Q By the way, what is causing the absenteeism on Saturday? You are the man in charge of operations; I suppose you are the man to answer this.

A Well, there are various factors. Work has been fairly steady for the past few years and a great many men feel that five days a week is all they want to work. That has been stated at some of the Union meetings.

Q Apart from everything else, just the fact of having two off days is better than working six days?

A Correct.

Q Now, anything else?

A Well, there is the question of income tax.

Q Now tell us about that.

A Well, a great many men haven't got the correct understanding of the income tax laws.

BY COMMISSIONER MORRISON: They are not exclusively miners, I suppose?

A They figure if they make a little bit more than usual they lose it all in tax and as a result they keep their earnings down to a certain limit.

BY MR. FRAWLEY: Well, that is expressing it pretty completely.

I am told that that exists rather generally in the coal mining industry, and after all there are other industries, as Mr. Commissioner Morrison says, but fortunately for us we are only concerned with the coal mining industry. Now you do find that to be a fact, that the miner will judge the proportion of earnings which will go to taxes for the last shift or two in the week and will then decide whether he will work them or not?

A Correct.

Q You know that from first-hand knowledge, from talking to miners, do you?

A Yes, I do.

BY COMMISSIONER MORRISON: You were mining coal in Great Britain before you came to Canada?

A Yes.

Q You didn't spend all your time at the Glasgow Technical College? You had some practical experience in coal fields there?

A Right.

Q How many days a week do they work there?

A Usually they work an 11-day fortnight, five one week, six the next.

Q There was no Saturday afternoon work there, was there, in any of those fields?

A Oh yes.

Q Which field?

A All fields--Ayrshire, Lanarkshire, Fife. When they were working Saturday, that was the 6-day week, they worked Saturday afternoon.

Q When do they get to those football games? You don't hold them on the Sabbath, because a Scotchman wouldn't break the Sabbath, surely?

A Men on day shift used to start an hour earlier, started work at 5 a.m., and they got finished up and got washed up in time to be at the football match.

Q It was a pretty short shift, wasn't it?

A $7\frac{1}{2}$ hours.

Q What about the fields in England? Do you know anything about those?

A No.

Q I am informed they worked five days a week in England many years ago?

A That could be.

Q This idea of a 5-day week, people not wanting to work on a Saturday afternoon in Cumberland, it is not altogether new to coal mining, is it? It didn't originate over in the Island?

A No, I don't suppose it did.

Q As a practical miner, you told us that the seam in No. 5 Mine was 30 inches?

A 2 feet 6, yes.

Q I make it 30 inches.

A Correct.

Q Now if a man works five days, apart from Company viewpoint or Government viewpoint or Union viewpoint or ordinary common sense, works on his knees in 30 inches of coal, don't you think he has done his bit for that week?

A When you talk about 30 inches you don't have a complete picture. We have 30 inches of coal but we have also some rock bands in the field which raises the height of the working to nearer 4 feet.

Q All right, make it 4 feet. Don't you think if he has put in five days there he has done his bit?

A Well, it is open to question.

Q Well now, everything is open to question. I am asking, as a practical man, if a man is down there for five days don't you think he deserves to stay home for a day?

A Well, it depends on the individual, I suppose.

Q Generally speaking there is not so much difference between any of us?

A There are some who would like to work six days and there are a great many who would prefer to work five.

Q But your complaint is more that they don't work five, more than any complaint you have that they are not working six?

A Well, we certainly complain more bitterly when they don't work five.

BY MR. FRAWLEY: There is no danger they would claim work for six when they only work five, is there?

A No, our time-keeping system is too good for that.

Q But your contract doesn't require that you give them six days' work and if you shut down to a 5-day week you would have to pay them an extra shift?

A No.

BY THE CHAIRMAN: Do you know anything of a report made some years ago, I think, by a combination of English and Scotch that this coal mining industry is such a hazardous industry, such a tiresome, wearisome industry, and there are so many things that get into a man's system from that that a 5-day week is about all the ordinary man can stand and live an ordinary lifetime?

A No, I am not aware of that report.

BY MR. FRAWLEY: Anyway, as far as your Company is concerned you would be all for the 5-day week, and it seems to boil down to this, that only for the directives of Coal Control you would put it in?

A I didn't say that. I said it would be policy for the Company to work five days with the existing conditions of absenteeism. If the men turn out for work on the sixth day, then it would be the same as any other day.

Q You don't like it now because it puts your per ton cost of coal up out of all proportion?

A Yes, and it disorganizes the work.

Q Well, that is one argument you should put in a 5-day week, isn't it?

A Yes. Of course you must remember it reduces the tonnage mined.

Q I know it reduces it by this rather small amount.

BY COMMISSIONER McLAURIN: The Saturday shift is a good one.

It should be up over the other shifts because more men turn out Saturday mornings.

BY MR. FRAWLEY: Just one shift, though. I would like to know how you answered Commissioner Morrison, working in 30 inches five days a week is enough?

A As I pointed out, it is not 30 inches.

BY COMMISSIONER McLLURIN: Say 4 feet. Commissioner Morrison conceded that.

A As I said to Mr. Morrison, there are man who like to work six days a week and there are others who prefer to work five.

BY MR. FRAWLEY: Even those who work the six days, they have to work with leather knee-pads down in that coal, don't they?

A Some of the face men wear knee-pads.

Q I was talking to one on the boat the other night that had to.

A Yes. Still others don't wear pads; they seem to get along without them.

Q You would rather leave it, you would like that extra tonnage that comes up on Saturday although it throws your cost per ton out of scale?

A Under present conditions, yes.

Q Now let's have Mercoal, eh?

A All right.

Exhibit 89 - Map showing the surface and coal leases at Mercoal

This plan here shows the surface and coal leases at Mercoal. The surface is shown in red, coal leases shown in grey.

Q What are you putting in next?

Exhibit 90 - Plan showing coal reserves at Mercoal

A This is a plan showing the coal reserves at Mercoal. Here again we have the same color scheme. We have two seams at Mercoal, called No. 1 and No. 2 on the chart. The patch in red again the main workings, green is actual in No. 2 seam; we have 745,000 tons there. Probable, in purple here, in No. 2 seam we have 8,500,000 tons and in No. 1 seam 248,000 in that area. In the yellow area, possible, in No. 2 seam 25,000,000; in No. 1 seam 11, 110,000. Total for Mercoal: Actual, 745,000; probable, 8,748,000; possible, 36,110,000, a grand total of 45,603,000.

Q Did you use the same methods for arriving at probable and possible in your Mercoal mine?

A Yes.

Q How was that yellow determined, by drilling?

A Not by drilling, by outcrops.

Q You don't know what they do at depth?

A No, we have no knowledge. If we had one or two drill holes in there we would class it off as probable, because it is a fairly regular field; the outcrop runs for miles, and the coal seams run in the form of a syncline. The outcrops at Mercoal go down to depth and then come up again at Coalspur and Yellow Head here, so we believe the whole area contains coal.

BY COMMISSIONER MORRISON: That Coalspur having one field developed, you would not have to be urged over much to put that yellow field in actual?

BY COMMISSIONER McLAURIN: And all the possible in probable.

BY MR. FRAWLEY: That is not a new operation? Somebody else was operating that property when your Company took it over?

A Yes, it was operated by White River Hard Coal Company, which we took over in 1941.

Q And I suppose you benefitted by the result of geologizing that they did?

A Yes, they had done some work along the outcrops.

Q Is that all you want to say about Mercoal?

A Yes.

Q You have nothing to add to that with regard to that Mercoal operation, nothing to add to what Mr. Plommer told us this morning? That coal has to fill a gap in your domestic supply?

A That is correct.

Q Are you shipping it east at all yet?

A There may be a little going east but most of it comes west.

Q You ship it into Vancouver?

A Yes.

Q How much a ton freight does it carry?

A I am not at home at all with freight rates.

Q That's right; I shouldn't be asking you that.

BY COMMISSIONER McLAURIN: What is your tons per man production there?

A At Mercoal our average per man is about 4 tons.

BY MR. FRAWLEY: How is the absenteeism at Mercoal?

A The absenteeism is very bad at times, as much as 25%.

Q What causes that?

A They get itchy feet and they want to get out to Edson and Edmonton for a few days; sometimes forget to come back.

Q How about Saturday? Do they work well on Saturday?

A They do work well on Saturday there.

Q Better than at the Island mines?

A Much better.

Q I wonder if there is a reason for that? If so, will you tell us?

A I have not been able to find any reason for it.

Q Has it anything to do with the fact that some of those men are part miner, part farmer?

A Some of them are.

Q Income tax might enter into that perhaps?

A Yes, it has been talked about up there, too.

Q And is the effect as acute as it is down here on the Island?

A I should say it is, but nevertheless for some reason we get an exceptionally good turn-out on Saturday at Mercoal.

Q But you are never sure that you are going to get a full shift every day?

A No, it depends on the beer coming into town. Sometimes there is a dearth of beer for a few days and a shipment arrives and a great many have a couple of days off.

BY COMMISSIONER McLAURIN: It is chronic with the industry all over the continent.

BY THE CHAIRMAN: And does it apply altogether to miners? Are miners the only people in this country who drink beer?

BY COMMISSIONER McLAURIN: That production is the over-all production, 4 tons per man?

A Yes.

Q This coal you just screen? There is no beneficiation or washing up there?

A No washing up there. We screen and pick it, hand pick it.

Q And you are getting, I think, 1100 tons a day?

A Well, our average is a little less than that. It is well over 1000.

Q For a 6-day working week?

A Yes.

Q And you haven't had any shut-down time, except possibly for railway cars, shortage of cars? No shortage of orders?

A The occasional break-down, but so far we have had enough orders to warrant working steady time.

Q And you have been improving that plant?

A We have done a lot of improving since we took over.

Q What have you invested there? Roughly \$50,000?

A Oh, much more than that.

Q Are you only working one seam there at the present time?

A Yes, we are working the bottom part of the seam which we call the No. 2 seam, 6 feet up to 8, pitching some.

BY COMMISSIONER MORRISON: That might be the reason why the men at Mercoal work on Saturday, a better seam?

A Yes, but it is very steep. There is a clot of limbing around there.

BY COMMISSIONER MORRISON: I have been down there before you were.

A Probably.

BY COMMISSIONER McLAURIN: You are marketing most of your Mercoal coal in the B.C. market?

A That is correct.

Q You have an accessibility factor to this market much more favorable than some of the other Alberta mines?

A Yes. We have a good sales staff.

BY MR. FRAWLEY: In the new classification that is high volatile C?

A Yes.

BY COMMISSIONER McLAURIN: Runs around 11,000 B.T.U.?

BY MR. FRAWLEY: 10,360.

MR. BAIRD: 11,900.

BY COMMISSIONER McLAURIN: Did you get that figure from your salesman's book? Is that the best?

BY MR. FRAWLEY: What is the ash?

A About 7%.

Q Coalspur coal here runs 13.6.

A That is up in the stripping; that is a dirty seam.

Q Now is there anything else?

EXAMINED By Senator Farris.

Q Have you any mines with an 8-foot seam on the Island?

A We have a mine at No. 10 in Nanaimo where the coal sometimes is 8 feet thick.

Q How is the absenteeism there?

A It is very high at No. 10.

T. A. HORNE Recalled. Examined by Mr. Frawley.

Q On page 2 of your brief--would you mind looking at it--you say: "Furthermore, of the total tonnage handled in this area, there is a considerable volume from the Drumheller field which is indirectly bonused by a 65¢ a ton rail subsidy and thus enjoys a market which normally would be beyond their reach." Now Mr. Plommer certainly told us this morning that in his opinion that Drumheller coal could come in here without any 65¢ help and make its way in this market.

A Oh yes, they could come in without a 65¢ a ton subsidy, it is perfectly true, and enjoy a very limited market, but without that 65¢ a ton it is very definitely limited; with it they represent quite a competition.

BY COMMISSIONER McLAURIN: I am not entirely clear on this subject of Drumheller coal coming in here. I recall that a year ago the Regional Coal Allocator at Calgary, representing the Alberta mines, was told he had to find 750,000 tons of coal for the B. C. market or somebody was going to be cold

here. Now isn't there a wartime price ceiling-Coal Control aspect of this that we should measure and appraise before we dismiss the 65 cents a ton?

A That is very true. Nothing can be said against it or for it; It is purely, we hope, a wartime measure in order to make coal available in this market, but we certainly would not like to see it continued.

Q But it is the Drumheller operator that is getting the benefit of the 65 cents?

A That's right.

Q You are sure of that?

A Yes.

Q Do you think the Drumheller operators would admit that when I speak to them a week from now?

A I don't doubt it, as long as they are sworn.

BY COMMISSIONER MORRISON: Are you sure Drumheller operators are getting the benefit?

A Yes.

BY MR. FRANKLEY: Surely the O.C. should tell the story--P.C. is it is called in Ottawa: "That assistance be granted to movements of coal from coal mines or coal properties in the Carbon, Sheerness, Drumheller, and Lethbridge areas of the Province of Alberta, as indicated in the list of Coal Mines of Canada, No. 4-1 issued by the Department of Mines and Resources, January 1942, and shipped to points in the Province of British Columbia south of the 50th parallel of latitude". Does that mean the Vancouver area?

A Yes.

Q "To which the tariff freight rate in effect at the time of shipment is five dollars (\$5.00 per net ton, on in excess thereof)"

A That's right.

Q And then No. 2: "That with respect to such movements of coal referred to in the above section 1 the assistance granted shall be a sum equivalent to a reduction of sixty-five cents

(65¢) per net ton from the said freight rates, the amount of the reduction being payable to the railway which shipped such coal." Now I don't think there is anything else of any moment; the rest are just the usual provisions.

BY COMMISSIONER McLAURIN: Does the Drumheller operator at pit-head get the same price for his coal that he gets for domestic sales in Alberta?

A That is correct.

Q And the \$5.00 freight rate is reduced by 65 cents, so that some people in the Vancouver area will be warm in an emergency?

A That's right.

BY COMMISSIONER MORRISON: How do you reconcile that with your statement?

A That is quite correct. My statement was not correct. The railway gets the benefit of it, but from the point of view of competition the operator gets the benefit.

BY COMMISSIONER McLAURIN: Well then, there is some reason for it. The reason is because people here need coal?

A Correct.

Q So the Coal Controller quite properly said, "We will see they get coal." So you would endorse the 65 cents?

A Under the present circumstances.

BY MR. FRAWLEY: Without that 65¢ the consumer in Vancouver would have to pay 65¢ more to get that coal?

A That is correct.

BY THE CHAIRMAN: Was this the Order you were talking about this morning, that somebody back there suggested he didn't know if it was in force or not?

BY COMMISSIONER McLAURIN: That's right.

BY MR. FRAWLEY: By the way, this is rather interesting. There was an amendment on the 24th of May, 1943, and the words "Carbon, Sheerness, Drumheller and Lethbridge," which were the original words, were deleted and "Carbon, Sheerness, Drumheller, Lethbridge and Taber" were added, then another

amendment on the 22nd of August deleted "Lethbridge and Taber" and substituted "Lethbridge, Taber and Brooks." So now we have Carbon, Shcerness, Drumheller, Lethbridge, Taber and Brooks.

BY COMMISSIONER McLURIN: The explanation of that was that they had some strip mines and they wanted to get coal from the strip mines and they had to change the area.

BY THE CHAIRMAN: Does this coal they have been talking about from this mine come both by C.P.R. and C.N.R.?

A No, it is all C.N.R.

Q Well, isn't there some difference between freight rates Canadian National and Canadian Pacific coming into this district from a distance of the same points of about a dollar, or something of that kind?

BY MR. FRAWLEY: Mr. Horne, do you know?

A I don't know what the Drumheller rates on the C.N.R. are at all, no.

BY THE CHAIRMAN: Do you get Drumheller coal in here by the C.P.R.?

A It comes in here by the Canadian Pacific, yes.

Q You don't know whether there is a difference in the freight rates or not?

A No, I don't. Common points under ordinary circumstances are equal.

Q I have been told there is a difference between \$3.90 and \$4.20.

MR. RAND M. THESON: From Fernie, a distance of 671.1 miles, coal moves to Vancouver on the C.P.R. at a rate of \$4.20 per ton, as compared with coal from Mercoal, 669.1 miles, by the Canadian National a rate of \$3.90.

BY THE CHAIRMAN: What difference in distance?

MR. M. THESON: The distance is approximately the same.

BY MR. FRAWLEY: What you say is, coal moves from Fernie to Vancouver Canadian Pacific for \$4.20, and coal moves from Mercoal to Vancouver Canadian National \$3.90, and the distances

are practically the same?

MR. MATHESON: Practically the same; two miles difference.

BY COMMISSIONER McLAURIN: That doesn't solve anything.

BY THE CHAIRMAN: It doesn't solve anything, but there seems to be a discrimination.

BY MR. FRAWLEY: Coal moves from Mercoal to Kamloops for \$4.20 and from Mercoal to Vancouver for \$3.90. Why, I don't know. Kamloops is up the country here, 350 miles from Vancouver.

BY THE CHAIRMAN: And I have also been told that the Canadian Pacific were willing to cut that rate to \$3.90 and that certain authorities of this Province intervened and it was never done.

BY MR. FRAWLEY: The \$4.20?

BY THE CHAIRMAN: Yes.

BY MR. FRAWLEY: Well, if we live long enough we may find out what makes up those freight rates.

BY THE CHAIRMAN: I think that is rather a serious question. Thirty cents a ton is a tremendous lot of money on coal, difference in freight rates.

PATRICK S. FAGAN. Examined by Mr. Frawley.

Q Mr. Fagan, you are the comptroller of Canadian Collieries (Dunsmuir) Limited?

A I am.

Q And you are filing some accounting data?

A I am.

Q And you have the exhibit in your hand?

A A copy of the exhibit.

Q And this exhibit is called "Accounting Data Required by the Royal Commission on Coal, to be Submitted March 26, 1945." Is this a reply to the questionnaire that you got some time ago?

A That is in reply to the questionnaire received from the Secretary of the Commission.

Q Well, it can go in but it doesn't need to go before the Commission at this time. We had better not be setting an

example. I think a lot of other people would question it very much. I don't think we will put this in. Just send that to Mr. Morrison in Calgary. That is all I want to do with that.

JOHN MCKELLAR. Examined by Mr. Frawley.

Q You live in South Wellington?

A Yes.

Q And you have filed with us a brief on behalf of Cassidy Mines?

A Yes.

Exhibit 91 - Brief on behalf of Cassidy Mines,
Cassidy, B.C.

Q Now I suppose you had better read it.

MR. MCKELLAR reads Exhibit 91:

We respectfully submit the following:-

(A) We own and operate the Cassidy Mines, situated at Cassidy, B.C., in the Cranberry District, Vancouver Island. The Property consists of 160 acres, with coal rights. Most of this coal has already been extracted, by the workings of the Granby Consolidated Mining, Smelting and Power Co., Ltd., Vancouver, B.C. The present life of the property, as a producer, is about one year.

(B) We are surrounded by the properties of the Canadian Collieries (Dunsmuir) Ltd., from whom we are unable to obtain a lease on a royalty basis. We are of the opinion this should be remedied. Should we be able to lease certain of their coal rights, we could continue operations, and employ quite a number of coal miners, to the benefit of this District.

I am only a coal miner; I am digging coal every day, and I hope that any questions, you will give me time to answer.

BY THE CHAIRMAN: You haven't finished your brief.

A That is all I have to say. Anything more I will say straight from the shoulder.

BY THE CHAIRMAN: You will understand that the oath is confined to the actual facts that you are to depose to, and please

don't give too much hearsay. You are allowed to express your own opinions, and if you have information that you got from somebody else, give us the source of that information. (Oath administered).

EXAMINED BY Mr. Frawley.

Q What is your complaint, or whatever you want to call it, with respect to this situation at Cassidy?

A Well, you seen that plan that was over there, all Vancouver Island, they got the grant of the whole Island. They got them in '84; don't pay any taxes; they own all the coal rights. Any benefit they are taking today doesn't go to anybody else but Canadian Collieries. I have got a little mine. Three of us went in; put in all the money we had; bought off the Granby Company.

Q You bought from the Granby?

A Consolidated.

Q And how did they hold their rights?

A They got it with a Crown grant. There is very few on the Island with settlers rights.

Q Canadian Collieries never had anything to do with that property?

A No.

Q And what did you do?

A We took the pillars out and put diamond drills down and got a little piece of solid coal.

Q When you went in it was just what you would call a salvage proposition?

A Yes.

Q You completed that, did you?

A Yes.

Q And now just carry on from there.

A We put two diamond drill holes down and found a little solid coal which the Granby people didn't operate, it was only a small amount, and we operated this mine until once we got so far and we couldn't buy machinery; then you come up against

Canadian Collieries property; you are stopped.

BY THE CHAIRMAN: What production did you get out of that mine altogether? How long have you been operating?

A 8 years.

Q What production did you get out of it?

A We average I guess around 1500, 1600 tons a year, but we could produce more right today; it just means a job for me digging coal out. We could take more; we just make it last.

BY MR. FRAWLEY: You exhausted your rights that you acquired from the Granby Company?

A No, the life will be one year.

Q You have about another year's work before you finish this Granby operation?

A Yes.

Q You would like to go on and acquire some further property from Canadian Collieries?

A Yes.

Q Did you approach them?

A Yes, I have been there. I have even had the manager, sitting here, down my mine.

Q That is Mr. Baird?

A Mr. Baird.

Q Whom did you approach to acquire some rights?

A Mr. Fagan first, Mr. Baird and Mr. Smart. I was to see Mr. Plommer but I never seen him, or heard any more.

Q You placed before them a formal proposition to acquire some of their rights?

A We asked them to buy us out or give us the deeps.

Q Why would they want to buy you out?

A We took a road through to this coal already there. We had our slopes down all ready to transact.

Q Into their coal?

A Into their coal. We had tracks in, only 25 feet to go.

Q How did you get tracks into their coal?

A I never said into their coal; 25 feet off.

Q What proposition did you make to them?

A Just what I say here. We asked them to buy us out or give us a lease.

Q You have asked them for a lease?

A Yes.

Q And you say they have not replied to you?

A They have not replied.

Q How far is the property which you would like to acquire from them? How far is it from any present workings of theirs?

A Oh, that is No. 10. It is from the mouth of the mine I would say two mile.

Q If they are going to operate this particular property they will do it from No. 10, will they?

A No, they couldn't do that from No. 10. The old Granby workings is stopped there and they won't be alongside the Granby workings.

BY COMMISSIONER MORRISON: What seam are you operating now, the Douglas seam?

A Douglas seam, yes.

BY THE CHAIRMAN: How many men do you employ?

A We have had as high as 10. It is a little bit property; we couldn't put any more men on.

Q Did you get your investment out of it, plus interest?

A No, you can't get your investment out because you are putting too many slopes down.

Q No, no. You invested, say a couple of thousand in that mine?

A We had a lot more than that.

Q About how much? \$5,000 or \$6,000?

A Yes, around there.

Q I suppose you have got your money out of that with some little dividends?

A No, we have kept on developing all the time this little piece of property. We put four slopes down in solid rock.

Q You did that because you thought some day you would get a lease from the Collieries?

A Yes, we have proven their ground, but I don't think it is right that one company should own all the coal in the country. That is not competition. I don't think there is much free enterprise there.

BY THE CHAIRMAN: Well, yes, they are enterprising enough to have the whole thing.

BY SENATOR FARRIS: Have you ever put a price on what you want for it?

A No, we have never put a price on it, no, because we never heard any more about it.

BY THE CHAIRMAN: What do you think we could do about it?

A I think that those coal rights should be given out.

Q This is not only not Provincial property or Dominion property, it is absolutely private property. Most of the coal is owned by the Crown under Provincial rights. You see you are in a little different position. If those coal areas were owned by the Crown there might be something we could do about it, but to interfere with private rights, I don't know.

BY COMMISSIONER McLAURIN: He hasn't made an offer yet. I haven't heard any evidence yet of a specific offer having been made.

BY MR. FRAWLEY: I don't think you have exhausted yourself with those people yet.

A It doesn't look an awful lot. The only thing is it is an awful thing that in the whole of Vancouver Island one company owns all the coal.

BY COMMISSIONER MORRISON: As I understand it, you are not talking about confiscation. You want to pay these people a royalty?

A Yes.

Q Did you ever have a conference with Mr. Plummer?

A No. I was told I was to have one.

Q Did you know he was the general manager?

A Oh yes.

Q He is boss man they tell me. You had better start at the top again.

A We are willing to pay a fair lease on it to get a few acres of coal. It is better for the district.

BY THE CHAIRMAN: I think the suggestion has been made that you had better make another attempt to see the management, or offer to sell, or how much you are willing to pay for the coal you wish to take over.

BY MR. FRAWLEY: All right, thank you, Mr. McKellar.

GEORGE MURRAY. Examined by Mr. Frawley.

Q You are associated with Merritt Coal Mines Limited?

A Yes.

Q And you have a brief that you have filed with us?

Exhibit 92 - Brief submitted by Merritt Coal
Mines Ltd., Merritt, B.C.

All right, Mr. Murray, will you proceed to submit this brief of the Merritt Coal Mines Ltd.

MR. MURRAY proceeds to read Exhibit 92:

We herewith submit our brief dealing with the various subjects of which your secretary has advised us, and which may be included in the scope of its enquiries.

1. LOCATION OF COAL FIELDS

Merritt Coal Mines Ltd. is located in what is generally known as the Nicola Coal Area, which is a portion of the Nicola-Princeton Coal Area, covered by several geological reports issued by our Dominion Department of Mines and Resources.

The Nicola Coal Area has been divided, by volcanic action, into three distinct basins - namely, Quilchena; Ten Mile Creek and the Diamond Vale Areas.

As our operations are confined to the Diamond Vale Area, practically all of our comments under the heading of "Production" will deal with this area.

2. CLASSIFIED INVENTORY OF COAL RESOURCES
"DIAMOND VALE AREA."

(A) AVAILABILITY

The coal basin in which the Diamond Vale Area is located extends approximately three miles in an east-west direction, and two miles in a north-south direction.

Records on file at the Dominion Government Department of Mines show the existence of 25 feet of coal comprising four seams of workable thickness. Operations carried on by the Nicola Valley Coal and Coke Co., Middlesboro Collieries, and the Inland Coal Co., over a period of forty years have proven the existence of at least six seams, and since the above referred to operations were carried out in the same general coal basin, it is reasonable to assume that all of the seams above referred to underlie the rest of the basin.

Despite the very meagre amount of reliable information available, we feel that a conservative estimate would place at least ten million tons of coal available in the area, excluding that portion of the coal field already exhausted.

Practically all of the coal remaining lies in the flat area of the coal basin, and dips into the heart of the basin at an approximate angle of 26 degrees, which entails the use of heavy hoisting and pumping equipment. The amount of foreign material interlarded with the coal seams also necessitates the use of expensive washing and cleaning equipment, in order to properly prepare the coal for marketing.

(B) TRANSPORTATION

This coal area is served by the Nicola branch line of the Canadian Pacific Railway. This branch line runs through the coal area, and provides transportation to all of the available markets on the C.P.R. system.

(C) OPTIMUM RATE OF EXTRACTION

With sufficient capital available there is no reason why this area should not be developed and find ready market for a production of 500 tons per day.

Based on an estimate of 260 working days per year, and a per ton man day output of 2.5 tons would provide employment for 200 men for seventy years.

3. COSTS OF PRODUCTION

Being only a small operation, we feel that we can contribute but little which would be helpful to the Commission in arriving at a basis upon which costs could be clearly defined.

We commenced production in August of 1943, and showed a loss for that year in our operations.

Pressure of other work by the Chartered Accountant who previously audited our books has prevented him being able to do so for the last current year; but our efforts to continue operations in face of many difficulties has placed us in a position of having failed to have our books ready for auditing.

Speaking generally, in relation to this coal area, we wish to take this opportunity of advising this Commission that wages have been increased 86%, while we have been permitted to increase the selling price of our product only 17%.

BY COMMISSIONER MORRISON: What are they now? Are they as high as they are on Vancouver Island?

A. No. If you care to, we will discuss that. They were set at the same rate. (Continues brief):

Apart from the above stated facts, we wish to state that we could not, under existing conditions, present a picture which should represent our actual operating costs, by reason of the fact that we are compelled to endeavor to carry on with much less than the required minimum of supplies necessary for efficient operation and development.

4. NATURE AND EXTENT OF SUPERVISION AND REGULATION BY GOVERNMENT

Our experiences under the above heading have forced us to the conclusion that the coal industry is being regulated to death; but will concede the fact that such has not been the case with other, and particularly, some of the larger operations.

Some operations have been given very preferred consideration, whilst we, as one of the small operations, who stepped in to do our share during the acute coal crisis, have had practically every conceivable obstacle placed in our way. In making the above comments we have particularly in mind our treatment under the administration of the Emergency Coal Production Board.

We will deal with the matter of Supervision and Regulation under the following headings:

- (a) Wages
- (b) Selling Prices
- (c) Labor Supply
- (d) Markets

WAGES

Following the outbreak of war, and prior to the establishment of the Emergency Coal Production Board, Dr. W. A. Carrothers, Fuel Controller for the Province of British Columbia, was appointed by the Dominion Government to act for them in that capacity also.

During Dr. Carrothers' tenure of office the cost of living had gone up; the coal miners asked for and received an increase in wages, and coal operators, in return, were granted an increase in selling price to meet the increased production costs.

Upon the establishment of the Emergency Coal Production Board, the above procedure was repeated, with this important difference: the coal operators in the Nicola-Princeton Area were granted no increase in selling price of coal to compensate for any wage increase which had been granted. Following the miners' strike in the fall of 1943, and the subsequent increase in wages granted, we were advised that we must pay the Crow's Nest scale of wages. This meant a total wage increase of 86% above the pre-war wage scale for this area.

SELLING PRICES

On September 16, 1943, we had started production and wrote to the Wartime Prices and Trade Board requesting the establishment of a selling price schedule for our various grades of coal.

The Wartime Prices and Trade Board referred this matter to the attention of the Emergency Coal Production Board.

On October 1, 1943, we were advised by the Board to the effect that they could see no reason why we should be allowed a higher selling price than that existing at the neighboring Middlesboro Collieries, despite the fact that wages in this area had increased 49.7%, and pre-war selling prices prevailed.

We protested this decision, and on November 12, 1943, we were advised that we could increase our selling prices by approximately 7%.

Following the establishment of the Crow's Nest Wage Scale, operators in the Nicola-Princeton area were granted the following selling price increases:

Lump coal	80 cents per ton
Smaller sizes	30 cents per ton

BY MR. FRAWLEY: You use the words "Crow's Nest Wage Scale". What are you referring to there?

MR. MURRAY: That is the scale of wages set in District 18. The scale of wages was slightly higher in the Crow's Nest field than it was on Vancouver Island, I believe, and when Justice O'Connor made his award he stipulated that the wages prevailing in the Crow's Nest Pass area would be the scale of wages. (Continues brief):

The above prices worked out at an average increase of 41.37¢ per ton for our operation. Mines operating in the coastal area of B. C. had previously been granted the following increases:

Lump Coal	\$1.00 per ton
Nut Coal	0.50 per ton
Pea Coal	1.00 per ton

BY COMMISSIONER MORRISON: When you refer to coastal operators you mean on the Island?

MR. MURRAY: Yes. (Continues brief): To compensate coastal operators for the wage increases granted by Justice O'Connor in 1943, they were granted the following increases:

Lump Coal	\$1.00 per ton
Nut Coal	1.00 per ton
Pea Coal	0.70 per ton

All of the above facts were very forcibly pointed out to the Emergency Coal Production Board but brought no results whatsoever. Largely as a result of this maladministration of the coal industry in the Nicola-Princeton area, Middlesboro Collieries, Granby Collieries and Princeton-Tulameen Mines were compelled to suspend operations, as the Emergency Coal Production Board refused to recognize the tremendous handicap imposed by the discriminatory wage scale and price set-up, and refused to grant the high subsidy assistance which would have been necessary in order to continue operations.

Labour Supply

As administered by National Selective Regulations has been well administered through the branch in our district and we have had every assistance and co-operation in the matter of securing employees. However we must record the fact that the Emergency Coal Production Board stepped into this field, and we have on record certified copies of correspondence between the Emergency Coal Production Board and a Department of the armed services wherein the latter were advised that the Merritt Coal Mines Limited were not on the preferred list for receiving soldier-miners.

BY THE CHAIRMAN: Were you getting enough labor without that?

MR. MURRAY: No, we had applied for a soldier-miner and he was advised to apply elsewhere. (Continues brief):

The most illogical part of this matter is that in an individual case a soldier who asked to be employed by Merritt Coal Mines Ltd., was advised that he should request to be released to Middlesboro Collieries. The per ton man day production at the latter operation was less than ours and every ton of coal produced at Middlesboro was costing the government more than \$2.00 per ton in subsidy assistance and the Emergency Coal Production Board at the same time had flatly refused to grant Merritt Coal Mines Ltd. any subsidy assistance whatsoever.

BY THE CHAIRMAN: Do I understand that the Middlesboro Collieries, though they were getting this excellent assistance, closed down?

A Yes.

Q Why?

A Couldn't carry on; weren't getting sufficient subsidy.

BY MR. FRAWLEY: And you carried on without the subsidy?

A Yes. The subsidy, I have very reliably been informed, has reached as high as \$3.50 a ton in that operation.

BY COMMISSIONER MORRISON: Are you getting any subsidy now?

A We got 60 cents a ton subsidy for the first six months of the current year but we have been advised unless we comply with certain conditions it will be suspended.

BY MR. FRAWLEY: What is this \$3.50?

A The subsidy required to enable them to carry on would be \$3.50.

Q And did the Emergency Coal Production Board buck at that figure?

A Yes.

Q You don't think they are paying more than \$3.50 in other parts of the country?

A I don't think so.

BY COMMISSIONER McLAURIN: They are.

A Well, on the question of subsidy, I would like to point out for the first eight months of our operation we received no subsidy whatever, although the engineer for the Coal Production Board had recommended that we receive a subsidy. We have received a subsidy for six months operation and have been notified that at present it is suspended.

4.00 P.M. - COMMISSION ADJOURNED

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